

WEST RIDGE MINE

007/041

CHANGE TO THE MINING AND
RECLAMATION PLAN

TO ALLOW:

LONGWALL MINING WITHIN
PANEL BLOCK 18-21

IN THE
PENTA CREEK FEE LEASE

RESPONSE TO DEFICIENCIES
(TASK #3733)

and

SUBMITTAL OF CLEAN COPIES

SUBMITTED: FEBRUARY MARCH 10, 2011

COVER LETTER.....C1/C2 FORMS

C/007/041 Incoming

#3777

K



P.O. Box 910, East Carbon, Utah 84520
Telephone (435) 888-4000 Fax (435) 888-4002

Utah Division of Oil, Gas & Mining
Utah Coal Program
1594 West North Temple, Suite 1210
P.O.Box 145801
Salt Lake City, UT 84114-5801

Mach 10, 2011

Attn: Daron Haddock
Permit Supervisor

Re: West Ridge Mine C/007/041
Permit Change for Longwall Panels North of Grassy Trail Reservoir
Longwall Panel Block 18 thru 21
Penta Creek Fee Lease Extension
Response to Deficiencies, Task #3733

Dear Mr. Haddock:

Enclosed are seven (7 ea.) clean copies of a change to the West Ridge MRP, which includes the response to deficiencies, Task #3733. This change is to allow longwall mining within the newly-acquired Penta Creek Fee Lease Extension and federal lease UTU-78562 north of the Grassy Trail reservoir, and development mining within SITLA lease ML-51744 in 2006. Based on discussions and agreement with Steve Christensen, in an effort to shorten the turn-around time involved for approval, this submittal includes the clean copies.

If you have questions or comments please contact me at (435) 888-4017.

Sincerely,

David Shaver
Resident Agent

RECEIVED

MAR 14 2011

DIV. OF OIL, GAS & MINING

APPLICATION FOR PERMIT PROCESSING

Permit Change <input type="checkbox"/>	New Permit <input type="checkbox"/>	Renewal <input type="checkbox"/>	Transfer <input type="checkbox"/>	Exploration <input type="checkbox"/>	Bond Release <input type="checkbox"/>	Permit Number: C/007/041
Title of Proposal: Change to the MRP to allow longwall mining in panel block 18-21. Response to deficiencies, Task 3733, and clean copies						Mine: WEST RIDGE MINE
						Permittee: WEST RIDGE Resources, Inc.

Description, include reason for application and timing required to implement:.

Instructions: If you answer yes to any of the first 8 questions (gray), submit the application to the Salt Lake Office. Otherwise, you may submit it to your reclamation specialist.

<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No	1. Change in the size of the Permit Area? 555.33 acres Disturbed Area? 100 acres <input checked="" type="checkbox"/> Increase <input type="checkbox"/> decrease.
<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No	2. Is the application submitted as a result of a Division Order?
<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No	3. Does application include operations outside a previously identified Cumulative Hydrologic Impact Area?
<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No	4. Does application include operations in hydrologic basins other than as currently approved?
<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No	5. Does application result from cancellation, reduction or increase of insurance or reclamation bond?
<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No	6. Does the application require or include public notice/publication?
<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No	7. Does the application require or include ownership, control, right-of-entry, or compliance information?
<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No	8. Is proposed activity within 100 feet of a public road or cemetery or 300 feet of an occupied dwelling?
<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No	9. Is the application submitted as a result of a Violation?
<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No	10. Is the application submitted as a result of other laws or regulations or policies? Explain:
<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No	11. Does the application affect the surface landowner or change the post mining land use?
<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No	12. Does the application require or include underground design or mine sequence and timing?
<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No	13. Does the application require or include collection and reporting of any baseline information?
<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No	14. Could the application have any effect on wildlife or vegetation outside the current disturbed area?
<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No	15. Does application require or include soil removal, storage or placement?
<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No	16. Does the application require or include vegetation monitoring, removal or revegetation activities?
<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No	17. Does the application require or include construction, modification, or removal of surface facilities?
<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No	18. Does the application require or include water monitoring, sediment or drainage control measures?
<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No	19. Does the application require or include certified designs, maps, or calculations?
<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No	20. Does the application require or include subsidence control or monitoring?
<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No	21. Have reclamation costs for bonding been provided for?
<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No	22. Does application involve a perennial stream, a stream buffer zone or discharges to a stream?
<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No	23. Does the application affect permits issued by other agencies or permits issued to other entities?

☐ Attach 3 complete copies of the application.

I hereby certify that I am a responsible official of the applicant and that the information contained in this application is true and correct to the best of my information and belief in all respects with the laws of Utah in reference to commitments, undertakings, and obligations, herein. (R645-301-123)

Signed - Name - Position - Date

Subscribed and sworn to before me this 9th day of March, 2011.My Commission Expires:
Attest: STATE OF
COUNTY OF

Notary Public

March 27, 2013



Notary Public
LINDA KERNS
Commission #570211
My Commission Expires
March 27, 2013
State of Utah

Received by Oil, Gas & Mining

RECEIVED

MAR 14 2011

DIV. OF OIL, GAS & MINING

ASSIGNED TRACKING NUMBER

Application for Permit Processing Detailed Schedule of Changes to the MRP

Title of Application:

Change to the MRP to allow longwall mining in panel block 18-21,

Permit Number:

C/007/041

Penta Creek fee lease, Response to deficiencies, Task 3733, and clean copies

Mine: WEST RIDGE MINE

Permittee: WEST RIDGE RESOURCES

Provide a detailed listing of all changes to the mining and reclamation plan which will be required as a result of this proposed permit application. Individually list all maps and drawings which are to be added, replaced, or removed from the plan. Include changes of the table of contents, section of the plan, pages, or other information as needed to specifically locate, identify and revise the existing mining and reclamation plan. Include page, section and drawing numbers as part of the description.

			DESCRIPTION OF MAP, TEXT, OR MATERIALS TO BE CHANGED
<input type="checkbox"/> ADD	<input checked="" type="checkbox"/> REPLACE	<input type="checkbox"/> REMOVE	Chapter 1: all text
<input type="checkbox"/> ADD	<input type="checkbox"/> REPLACE	<input type="checkbox"/> REMOVE	
<input type="checkbox"/> ADD	<input checked="" type="checkbox"/> REPLACE	<input type="checkbox"/> REMOVE	Chapter 5: pgs 5-iv, 5-v, 5-8, 5-10, 5-15,
<input type="checkbox"/> ADD	<input type="checkbox"/> REPLACE	<input type="checkbox"/> REMOVE	5-26 thru 5-29
<input type="checkbox"/> ADD	<input type="checkbox"/> REPLACE	<input type="checkbox"/> REMOVE	
<input type="checkbox"/> ADD	<input checked="" type="checkbox"/> REPLACE	<input type="checkbox"/> REMOVE	Chapter 7: all text (for pagination)
<input type="checkbox"/> ADD	<input type="checkbox"/> REPLACE	<input type="checkbox"/> REMOVE	
<input checked="" type="checkbox"/> ADD	<input type="checkbox"/> REPLACE	<input type="checkbox"/> REMOVE	Appendix S-3C: BLM R2P2 Approval
<input checked="" type="checkbox"/> ADD	<input type="checkbox"/> REPLACE	<input type="checkbox"/> REMOVE	Appendix S-10: SITLA Mine Plan Approval
<input checked="" type="checkbox"/> ADD	<input type="checkbox"/> REPLACE	<input type="checkbox"/> REMOVE	Appendix S-13A: Grassy Trail Dam
<input type="checkbox"/> ADD	<input type="checkbox"/> REPLACE	<input type="checkbox"/> REMOVE	Monitoring/Inspection Plan
<input type="checkbox"/> ADD	<input type="checkbox"/> REPLACE	<input type="checkbox"/> REMOVE	Panel Block 18-21
<input checked="" type="checkbox"/> ADD	<input type="checkbox"/> REPLACE	<input type="checkbox"/> REMOVE	Appendix S-16 Grassy Trail Dam
<input type="checkbox"/> ADD	<input type="checkbox"/> REPLACE	<input type="checkbox"/> REMOVE	Seismicity Report, 2008, RB+G
<input checked="" type="checkbox"/> ADD	<input type="checkbox"/> REPLACE	<input type="checkbox"/> REMOVE	Appendix S-17 Grassy Trail Dam
<input type="checkbox"/> ADD	<input type="checkbox"/> REPLACE	<input type="checkbox"/> REMOVE	Seismicity Update Report, 2010, RB+G
<input type="checkbox"/> ADD	<input type="checkbox"/> REPLACE	<input type="checkbox"/> REMOVE	
<input type="checkbox"/> ADD	<input checked="" type="checkbox"/> REPLACE	<input type="checkbox"/> REMOVE	Appendix 7-5 Water Rights Summary
<input checked="" type="checkbox"/> ADD	<input type="checkbox"/> REPLACE	<input type="checkbox"/> REMOVE	Appendix 7-6A, 1999 and 2010 Sep/Spring Survey
<input type="checkbox"/> ADD	<input type="checkbox"/> REPLACE	<input type="checkbox"/> REMOVE	Appendix 7-14, Grassy Trail Right Fork
<input type="checkbox"/> ADD	<input type="checkbox"/> REPLACE	<input type="checkbox"/> REMOVE	Historical Flow Data
<input type="checkbox"/> ADD	<input type="checkbox"/> REPLACE	<input type="checkbox"/> REMOVE	
<input type="checkbox"/> ADD	<input type="checkbox"/> REPLACE	<input type="checkbox"/> REMOVE	

Any other specific or special instructions required for insertion of this proposal into the Mining and Reclamation Plan?

Title of Application:

Permit Number:

Mine: WEST RIDGE MINE

Permittee: WEST RIDGE RESOURCES

Provide a detailed listing of all changes to the mining and reclamation plan which will be required as a result of this proposed permit application. Individually list all maps and drawings which are to be added, replaced, or removed from the plan. Include changes of the table of contents, section of the plan, pages, or other information as needed to specifically locate, identify and revise the existing mining and reclamation plan. Include page, section and drawing numbers as part of the description.

[illegible]

Any other specific or special instructions required for insertion of this proposal into the Mining and Reclamation Plan?

CHAPTER 1.....REPLACEMENT PAGES

~WEST RIDGE MINE - PERMIT APPLICATION PACKAGE~

**TABLE OF CONTENTS- CHAPTER 1
R645-301-100 PERMIT APPLICATION REQUIREMENTS: GENERAL
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	Attachment 1-3 Proof of Publication
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	Attachment 1-5 Verification Statement
APPENDIX 1-2	Violation Information
APPENDIX 1-3	Reference List
APPENDIX 1-4	Proof of Lease Assignment
APPENDIX 1-4A	Federal Lease SL-068754, U-01215
APPENDIX 1-4B	Federal Lease UTU-78562
APPENDIX 1-4C	State Lease ML-47711
APPENDIX 1-4D	State Lease ML-49287
APPENDIX 1-4E	State Lease ML-51744
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APPENDIX 1-5	Current and Previous Coal Mining Permits
APPENDIX 1-6	Consultation and Coordination
APPENDIX 1-7	Ownership and Control
APPENDIX 1-8	Letter from Carbon County
APPENDIX 1-9	*****Deleted*****
APPENDIX 1-10	SITLA - Special Use Lease (Topsoil Borrow Area)
APPENDIX 1-11	Material Deposit Special Use Lease Agreement
APPENDIX 1-12	Waterline/Pump House Right of Way
APPENDIX 1-13	Correspondence Regarding Security Gate
APPENDIX 1-14	*****Moved*****
APPENDIX 1-15	Legal Description of Grassy Trail Reservoir

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R645-301-100 CHAPTER 1

MAP NUMBER	DESCRIPTION	SCALE
MAP 1-0	Permit Map	1" = 2000'
MAP 1-1	Location Map	1" = 2000'

R645-301-100 PERMIT APPLICATION REQUIREMENTS: GENERAL CONTENTS

SCOPE

The objective of this chapter is to set forth all relevant information concerning ownership and control of WEST RIDGE Resources, Inc., the ownership and control of the property to be affected by mining activities and all other information and documentation required under Part UMC.

R645-301-112 IDENTIFICATION OF INTERESTS

112.100 WEST RIDGE Resources, Inc. is a corporation organized and existing under the laws of Utah and qualified to do business in Utah.

112.200 The applicant, WEST RIDGE Resources, Inc. will also be the operator.

WEST RIDGE Resources, Inc.
P.O. Box 910
East Carbon, Utah 84520
(435) 888-4000
David Hibbs - President

Employer Identification Number: 87-0585129

112.220 The resident agent of the applicant, WEST RIDGE Resources, Inc., is:

Dave Shaver
WEST RIDGE Resources, Inc.
P.O. Box 910
East Carbon, Utah 84520

(435) 888-4000

112.230 WEST RIDGE Resources, Inc. will pay the abandoned mine land reclamation fee.

112.300 **Ownership and Control - See Appendix 1-7**

WEST RIDGE Resources, Inc. is the permittee and operator of the WEST RIDGE Mine. WEST RIDGE Resources, Inc. is a wholly owned subsidiary of ANDALEX Resources, Inc.. WEST RIDGE Resources, Inc. is a Utah corporation licensed to do business in the State of Utah. All leases associated with the WEST RIDGE Mine are owned by ANDALEX Resources, Inc. ANDALEX Resources, Inc. is a wholly owned subsidiary of UtahAmerican Energy Inc., which in turn is a wholly owned subsidiary of Murray Energy Corporation.

112.340 See Appendix 1-5

112.350 See Appendix 1-5

112.410 See Appendix 1-5

112.420 See Appendix 1-7

112.500 Surface Owners:

Bureau of Land Management
Utah State Office
136 East South Temple
Salt Lake City, Utah 84111

Glen Wells
700 West U.S. Hwy 6
Price, Utah 84501

Penta Creek, LLC
140 S. Newton
Albert Lea, MN 56007

Dave Hinkins
155 West 100 South
Orangeville, Utah 84537

School and Institutional Trust
Lands Administration
355 West North Temple, Suite 400
Salt Lake City, Utah 84180-1204

Matt Rauhala
1236 East Main
Price, Utah 84501

Subsurface Owners:

Bureau of Land Management
Utah State Office
136 East South Temple
Salt Lake City, Utah 84111

Penta Creek, LLC
140 S. Newton
Albert Lea, MN 56007

School and Institutional Trust
Lands Administration
355 West North Temple, Suite 400
Salt Lake City, Utah 84180-1204

WEST RIDGE Resources, Inc. is the holder of record for federal lease SL-068754 and UTU 78562 (see Table 1-1), state lease ML 47711 and ML 49287 (see Table 1-2A) and the Penta Creek Fee lease (see Table 1-2B).

Proof of lease assignment for all leases (Federal leases SL-068754 and UTU 78562, and State leases ML 47711 and ML 49287), and the Penta Creek fee lease can be found in Appendix 1-4.

112.600

Contiguous surface owners:

Bureau of Land Management
Utah State Office
136 East South Temple
Salt Lake City, Utah 84111

Dave Hinkins
155 West 100 South
Orangeville, Utah 84537
Glen Wells
700 West U.S. Hwy 6
Price, Utah 84501

Penta Creek, LLC
140 S. Newton
Albert Lea, MN 56007

School and Institutional Trust
Lands Administration
355 West North Temple, Suite 400
Salt Lake City, Utah 84180-1204

Contiguous subsurface owners:

School and Institutional Trust
Lands Administration
355 West North Temple, Suite 400
Salt Lake City, Utah 84180-1204

Penta Creek, LLC
140 S. Newton
Albert Lea, MN 56007

Dave Hinkins
155 West 100 South
Orangeville, Utah 84537

Bureau of Land Management
Utah State Office
136 East South Temple
Salt Lake City, Utah 84111

112.700 See Appendix 1-5

112.800 There are no pending interests or bids existing on lands contiguous to the present leased area.

112.900 After WEST RIDGE Resources, Inc. is notified that the application is approved, but before the permit is issued, WEST RIDGE Resources, Inc. will update, correct or indicate that no change has occurred in the information previously submitted under R645-301-112.100 through R645-301-112.800.

R645-301-113**VIOLATION INFORMATION**

- 113.100 The applicant or any subsidiary, affiliate or persons controlled by or under common control with the applicant has not had a federal or state permit to conduct coal mining and reclamation operations suspended or revoked in the five years preceding the date of submission of the application.
- 113.120 The applicant etc. has not forfeited any performance bond or similar security
- 113.200 Not applicable
- 113.300 A listing of violations received by the applicant in connection with any coal mining and reclamation operation during the three year period preceding the application date is provided in Appendix 1-2. MSHA numbers for the operations can be found in Appendix 1-5. There have been no unabated violations or cessation orders issued to any affiliated companies during the previous three years.
- 113.400 After WEST RIDGE Resources, Inc. is notified that the application is approved, but before the permit is issued, WEST RIDGE Resources, Inc. will update, correct or indicate that no change has occurred in the information previously submitted under R645-301-113.

R645-301-114**RIGHT OF ENTRY INFORMATION**

- 114.100 WEST RIDGE Resources, Inc., currently holds 4,899.92 acres of federal coal (2,650.67 acres leased under SL-068754 and 2249.25 acres leased under UTU 78562) in the Book Cliffs coal field (refer to Maps 1-0 and 5-3). A complete legal description of all Federal leases held by WEST RIDGE is found in Table 1-1. WEST RIDGE currently holds 2162.34 acres of state coal (801.24 acres under ML 47711, 881.10 under ML 49287, and 480 acres under ML 51744. A complete legal description of all State leases held by WEST RIDGE is found in Table 1-2. WEST RIDGE also holds a 734.44 acre lease on contiguous private (fee) coal lands located along the eastern side of the mineable reserve. A complete legal description of this fee lease is found in Table 1-3. None of these leases are the subject of any pending litigation. Proof of lease assignment for all leases can be found in Appendix 1-4.

WEST RIDGE Resources, Inc. bases its legal right to enter and conduct mining activities in the permit area pursuant to the language contained in the Federal Coal Lease, Part I Lease Rights Granted which reads as follows:

"That the lessor, in consideration of the rents and royalties to be paid and the covenants to be observed as hereinafter set forth, does hereby grant and lease to the

lessee the exclusive right and privilege to mine and dispose of all the coal in, upon, or under the following described tracts of land, situated in the State of Utah... together with the right to construct all such works, buildings, plants, structures and appliances as may be necessary and convenient for the mining and preparation of the coal for market, the manufacture of coke or other products of coal, the housing and welfare of employees, and subject to the conditions herein provided, to use so much of the surface as may reasonably be required in the exercise of the rights and privileges herein granted."

In addition to the coal leases, WEST RIDGE also holds several surface use permits as part of the operation, including:

- 1) SITLA Special Use Lease Agreement No. 1163. The substitute topsoil borrow area, which is also included within the permit area, is located on lands administered by the Utah School and Institutional Trust Lands Administration (SITLA). This area is located within the SE1/4 of section 16, T 14 S, R 13 E. SITLA has issued a long term special use permit to WEST RIDGE Resources, Inc. which provides full assurance that the topsoil resource in this area will be available for (and, indeed dedicated to) final reclamation of the West Ridge minesite if needed. This area is not contiguous with the main coal leasehold. (See Appendix 1-10 for details)
- 2) BLM Right-of-Way UTU-77120 This right-of-way authorizes the installation and operation of a pumping station used to facilitate the delivery of culinary water to the West Ridge Mine. This area is not contiguous with the main coal leasehold. (See Appendix 1-12 for details)
- 3) BLM Right-of-Way 87110 This right-of way authorizes the installation of three (3 ea.) catchment structures in the C Canyon drainage below the mine. These catchments are designed to provide containment of unanticipated coal-fines accumulations from the mine discharge water. These catchment structures comprises a total of 0.69 acres (Refer to Appendix 5-15 for details).

The permit area consists of the following areas:

- 1) all of federal coal leases SL-068754-U-01215 (2,650.67 acres)
- 2) all of federal coal lease UTU 78562 (2,249.25 acres),
- 3) all of state coal leases ML-47711 (801.24 acres)
- 4) all of state coal lease ML-49287 (881.10 acres)
- 5) much of state coal lease ML-51744 (212.5 acres)
- 6) much of the Penta Creek fee coal lease (510.55 acres)
- 7) SITLA surface lease 1163, for topsoil borrow area (9.6 acres).
- 8) BLM right-of-way UTU-77120, for pumping station (0.23 acres)
- 9) BLM right-of-way UTU-87110, for catchment structures A, C and E (0.69 acres)
- 10) Carbon County authorization, road security gate (0.79 acres). See Appendix 1-13.

The total permit area is 7316.62 acres. Refer to Map 1-1 for the permit area location. Refer to Table 1-4 for the legal description of the permit area by composite leasehold, and Table 1-5 for the legal description of the permit area in total area. Table 1-6 describes the surface ownership of the permit area.

Disturbed area within the permit area consists of the following;

1)	Minesite surface facilities	29.82 acres
2)	Pumping station	0.23 acres
3)	GVH installation	0.24 acres
4)	GVH topsoil storage	0.1 acres
5)	Catchment structures A	0.12 acres
6)	Catchment structures C	0.23 acres
7)	Catchment structures E	<u>0.23 acres</u>
	TOTAL	30.97 acres

See Table 1-7 for complete legal description of disturbed areas.

114.200 Not applicable, the fee lease mineral estate is not severed from the surface estate.

TABLE 1-1
FEDERAL LEASE and R.O.W. PROPERTIES

<u>PARCEL</u>	<u>ACREAGE</u>	<u>LEGAL DESCRIPTION</u>
<u>1) FEDERAL COAL LEASE SL-068754</u> (SL-068754-U-01215)	2,650.67	T 14 S, R 13 E Section 10: NE, E2NW, N2SE, SESE Section 11: All Section 12: S2SW, NWSW Section 13: S2, NW, S2NE, NWNE Section 14: E2, N2NW, SENW Section 15: NENE Section 24: N2, N2SE, NESW
<u>2) FEDERAL COAL LEASE UTU-78562</u>	2,249.25	T 13 S, R13 E Section 34: NESE, S2SE Section 35: All T 14 S, R 13 E Section 1: All Section 12: Lots 1 thru 4, S2N2, NESW, SE Section 13: NENE T 14 S, R 14 E Section 6: Lot 6, NESW Section 7: Lots 3 and 4 Section 18: Lot 1, E2NW
<u>3) PUMPING STATION</u> (BLM R.O.W. UTU-7712)	0.23	T 14 S, R 13 E Section 21: NENE (0.23 acres thereof)

4) CATCHMENT STRUCTURE A
(BLM R.O.W. UTU-87110)

0.23

T 14 S, R 13 E

Section 15: SESE (0.23 acres therein)

5) CATCHMENT STRUCTURE C
(BLM R.O.W. UTU-87110)

0.23

T 14 S, R 13 E

Section 28: NWNW (0.23 acres therein)

6) CATCHMENT STRUCTURE E
(BLM R.O.W. UTU-87110)

0.23

T 14 S, R 12 E

Section 25: SESE (0.23 acres therein)

TOTAL FEDERAL

4900.84 acres

TABLE 1-2
STATE (SITLA) LEASE and SPECIAL USE PROPERTIES

<u>PARCEL</u>	<u>ACREAGE</u>	<u>LEGAL DESCRIPTION</u>
<u>1) STATE LEASE ML 47711</u>	801.24	T 14 S, R 13 E Section 2: Lots 1 thru 4, S2N2, S2 (i.e. All) T 13 S, R 13 E Section 36: SW
<u>2) STATE COAL LEASE ML 49287</u>	881.10	T 14 S, R 13 E Section 3: Lots 1, 2, 3, S2N2, S2 Section 10: W2NW, SW, SWSE
<u>3) STATE COAL LEASE ML 51744</u>	480	T 13 S, R 13 E Section 36: N2, SE
<u>4) STATE SURFACE LEASE</u> SPECIAL USE PERMIT (Agreement #1163)	9.6	T 14 S, R 13 Section. 16: E2NESE (9.6 acres thereof, containing substitute topsil area)
<u>TOTAL STATE</u>	<u>2171.94</u>	

**TABLE 1-3
FEE LEASE PROPERTIES
(PENTA CREEK)**

<u>PARCEL</u>	<u>ACREAGE</u>	<u>LEGAL DESCRIPTION</u>
<u>1) PENTA CREEK FEE LEASE</u>	382.08	T 14 S, R 14 E
		Section 6: Lot 7, SESW
		Section 7*: Lots 1* and 2*, NENW*, E2SW*, SWSE
		Section 18: Lots 2 and 3, NWNE
*Less and excepting from the portion of the above legal subdivisions in Section 7, those lands under and around Grassy Trail Dam and Reservoir owned by East Carbon City and Sunnyside City, such lands being more accurately described in Appendix 1-15.		
<u>2) PENTA CREEK LEASE EXTENSION</u>	352.36	T 14 S, R 14 E
		Section 6: Lots 2, 3, 4 and 5, SENW, SWNE, NWSE, S2SE
<u>TOTAL FEE LEASES:</u>	<u>734.44</u>	

TABLE 1-4
LEGAL DESCRIPTION OF PERMIT AREA
(BY LEASEHOLD)

<u>PARCEL</u>	<u>ACREAGE</u>	<u>LEGAL DESCRIPTION</u>
<u>1) FEDERAL LEASE SL-068754</u> (SL-068754-U-01215)	2,650.67	T 14 S, R 13 E Section 10: NE, E2NW, N2SE, SESE Section 11: All Section 12: S2SW, NWSW Section 13: S2, NW, S2NE, NWNE Section 14: E2, N2NW, SENW Section 15: NENE Section 24: N2, N2SE, NESW
<u>2) FEDERAL LEASE UTU-78562</u>	2249.25	T 13 S, R13 E Section 34: NESE, S2SE Section 35: All T 14 S, R 13 E Section 1: All Section 12: Lots 1 thru 4, S2N2, NESW, SE Section 13: NENE T 14 S, R 14 E Section 6: Lot 6, NESW Section 7: Lots 3 and 4 Section 18: Lot 1, E2NW
<u>3) STATE LEASE ML 47711</u>	801.24	T 14 S, R 13 E Section 2: Lots 1 thru 4, S2N2, S2 T 13 S, R 13 E Section 36: SW

TABLE 1-4 (continued)

<u>4) STATE LEASE ML 49287</u>	881.10	T 14 S, R 13 E
		Section 3: Lots 1, 2 and 3, S2N2, S2
		Section 10: W2NW, SW, SWSE
<u>5) STATE LEASE ML 51744</u>	212.5	T 13 S, R 13 E
		Section 36: SW, SWNWSWNW, S2S2NW, S2SWNE, W2SE, SESE, S2NESE, NWNESE
<u>6) PENTA CREEK FEE LEASE</u>	238.17	T 14 S, R 14 E
		Section 6: Lot 7, SESW
		Section 7*: Lot 1*, SESW, SWNESW
		Section 18: Lots 2 and 3
<u>7) PENTA CREEK LEASE EXTENSION</u>	272.38	T 14 S, R 14 E
		Section 6: Lots 3, 4 and 5, SENW, SWNE, NWSE, SWSE
<u>8) PUMPING STATION</u> (BLM R.O.W. UTU-7712)	0.23	T 14 S, R 13 E
		Section 21: NESENE (0.23 acres thereof, containing pumping station)
<u>9) TOPSOIL SALVAGE AREA</u> (SITLA special use agreement #1163)	9.6	T 14 S, R 13 E
		Section 16: E2NESE (9.6 acres thereof, containing substitute topsoil area)
<u>10) CATCHMENT STRUCTURE A</u> (BLM R.O.W. UTU-87110)	0.23	T 14 S, R 13 E
		Section 15: SESW (0.23 acres thereof, containing catchment structure)
<u>11) CATCHMENT STRUCTURE C</u> (BLM R.O.W. UTU-87110)	0.23	T 14 S, R 13 E
		Section 28: NWNW (0.23 acres thereof, containing catchment structure)
<u>12) CATCHMENT STRUCTURE E</u> (BLM R.O.W. UTU-87110)	0.23	T 14 S, R 12 E
		Section 25: SESE (0.23 acres thereof, containing catchment structure)

13) SECURITY GATE
(Carbon County authorization)

0.79

T 14 S, R 13 E

Section 15: NWSENE (0.79 acres thereof, containing security gate)

TOTAL PERMIT AREA

7316.62 acres

*Less and excepting from the portion of the above legal subdivisions in Section 7, those lands under and around Grassy Trail Dam and Reservoir owned by East Carbon City and Sunnyside City, such lands being more accurately described in Appendix 1-15.

**TABLE 1-5
LEGAL DESCRIPTION OF PERMIT AREA
(TOTAL AREA)**

T13S, R13E	Section 34	NESE, S2SE
	Section 35	All
	Section 36	SW, SWNWSWNW, S2S2NW, S2SWNE, W2SE, SESE, S2NESE, NWNESE,
T14S, R12E	Section 25	SESE (part thereof containing catchment structure E)
T14S, R13E	Section 1	All
	Section 2	All
	Section 3	Lots 1, 2 and 3, S2N2, S2
	Section 10	All
	Section 11	All
	Section 12	All
	Section 13	All
	Section 14	E2, N2NW, SENW
	Section 15	NENE, NWSENE (part thereof, containing security gate) SESW (part thereof, containing catchment structure A)
	Section 16	E2NESE (part thereof, containing substitute topsoil area)
	Section 21	NESENE (part thereof, containing pumping station)
	Section 24	N2, N2SE, NESW
	Section 28	NWNW (part thereof, containing catchment structure C)
T14S, R14E	Section 6	Lots 3, 4, 5, 6 and 7, SENW, E2SW, W2SE
	Section 7*	Lots 1*, 3 and 4, SESW, SWNESW
	Section 18	Lots 1, 2 and 3, E2NW

TOTAL PERMIT AREA = 7316.62 acres.

*Less and excepting from the portion of the above legal subdivisions in Section 7, those lands under and around Grassy Trail Dam and Reservoir owned by East Carbon City and Sunnyside City, such lands being more accurately described in Appendix 1-15.

**TABLE 1-6
SURFACE OWNERSHIP OF PERMIT AREA**

T(S)/R(E)	Section	BLM	Penta Creek	Hinkins	Wells	Rauhala	SITLA	Total
13/13	34	-	-	-	120.00	-	-	120.00
13/13	35	40.00	-	448.91	151.09	-	-	640.00
13/13	36	-	372.50	-	-	-	-	372.50
14/12	25	0.23	-	-	-	-	-	0.23
14/13	1	283.75	328.68	-	-	39.92	-	652.35
14/13	2	-	641.24	-	-	-	-	641.24
14/13	3	-	-	-	80.66	-	520.44	601.10
14/13	10	360.00	-	-	-	-	280.00	640.00
14/13	11	650.87	-	-	-	-	-	650.87
14/13	12	-	648.96	-	-	-	-	648.96
14/13	13	640.00	-	-	-	-	-	640.00
14/13	14	440.00	-	-	-	-	-	440.00
14/13	15	41.02	-	-	-	-	-	41.02
14/13	16	-	-	-	-	-	9.60	9.60
14/13	21	0.23	-	-	-	-	-	0.23
14/13	24	440.00	-	-	-	-	-	440.00
14/12	28	0.23	-	-	-	-	-	0.23
14/14	6	76.41	348.94	-	-	-	-	425.35
14/14	7	74.08	86.69	-	-	-	-	160.77
14/14	18	117.25	74.92	-	-	-	-	192.17
		3164.07	2501.93	448.91	351.75	39.92	810.04	7316.62

TABLE 1-7
DISTURBED AREA WITHIN PERMIT AREA

- 1) Minesite surface facilities: portions of the following, totaling 29.82 acres (all BLM)

T14S, R13E	Section 10:	SESESE NESESE
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T14S, R13E	Section 11:	SWNESW NWSESW NESWSW NWSWSW SWSWSW SESWSW
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T14S, R13E	Section 15:	NENENE NWNENE SWNENE SENENE NWSENE
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- 2) Pumphouse: portion thereof of the following, containing 0.23 acres (all BLM)

T14S, R13E	Section 21:	NESENE
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- 3) Gob gas vent hole (GVH) installation: portion thereof of the following, containing 0.24 acres (all SITLA)

T14S, R13E	Section 3:	NESWSE
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- 4) Gob gas vent hole (GVH) topsoil pile: portion thereof of the following, containing 0.1 acres (all SITLA)

T14S, R13E	Section 10:	SENWNW
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- 5) Catchment Structure A: portion thereof of the following, containing 0.12 acres (all BLM)

T 14 S, R 13 E	Section 15:	SESW
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- 6) Catchment Structure C: portion thereof of the following, containing 0.23 acres (all BLM)

T 14 S, R 13 E	Section 28:	NWNW
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7) Catchment Structure E: portion thereof of the following, containing 0.23 acres (all BLM)

T 14 S, R 12 E

Section 25: SESE

TOTAL DISTURBED AREA = 30.97 acres

R645-301-115**STATUS OF UNSUITABILITY CLAIMS**

115.100 The proposed permit area is not within an area designated as unsuitable for mining. WEST RIDGE Resources, Inc. is not aware of any petitions currently in progress to designate the area as unsuitable for coal mining and reclamation activities.

The area in which the proposed facility will be located has been evaluated within area management plans. It has not been found unsuitable for mining activities under any categories of examination.

115.200 Not applicable.

115.300 WEST RIDGE Resources, Inc. will not be conducting mining operations within 100 feet of an occupied dwelling. WEST RIDGE Resources, Inc. has received permission from Carbon County to construct facilities and operate coal mining activities within 100 feet of a public road. Refer to the letter from Carbon County in Appendix 1-8.

R645-301-116**PERMIT TERM**

116.100 The anticipated starting and termination dates of the coal mining and reclamation operation are as follows:

	<u>Begin</u>	<u>Complete</u>
Construction of Mining Pad, Mining Support Structures, and Portals	Apr. 1999	Dec. 1999
Begin Mining	Jan. 2000	
Terminate Mining		Dec. 2017*
Remove Facilities	Jan. 2018*	June 2018*
Regrade Area	July 2018*	Sept. 2018*
Revegetate Site	Oct. 2018*	Nov. 2018*

*This assumes mine life extended through acquisition of adjacent state and federal coal reserves.

116.200 The initial permit application will be for a five year term with successive five year permit renewals.

**R645-301-117 INSURANCE, PROOF OF PUBLICATION AND FACILITIES OR
STRUCTURES USED IN COMMON**

- 117.100 The Certificate of Liability Insurance is included as Attachment 1-1 in Appendix 1-1.
- 117.200 A copy of the newspaper advertisement of the application for a permit and proof of publication are included as Attachment 1-2 and 1-3 respectively, in Appendix 1-1. A copy of the newspaper advertisement for the Whitmore lease revision is included as Attachment 1-3 in Appendix 1-1.
- 117.300 Not applicable.

R645-301-118 FILING FEE

Verification of filing fee payment is included as Attachment 1-4 in Appendix 1-1.

R645-301-123 NOTARIZED STATEMENT

A notarized statement attesting to the accuracy of the information submitted can be referenced as Attachment 1-5 in Appendix 1-1.

R645-301-130 REPORTING OF TECHNICAL DATA

Technical reports prepared by consultants specifically for WEST RIDGE Resources, Inc. are typically presented in an appendix format and, in general, provide the name and address of the person or company (consultant) preparing the report, the name of the report, the date of collection and analysis of the data, and descriptions of the methodology used to collect and analyze the data. The body of the report usually will provide the date the actual field work was conducted and a description of the methodology used to collect and analyze the data. The format of each report may vary depending on the contents of the report and organization preparing it.

For laboratory analyses, such as Appendix 7-2 and 7-3, the company performing the analyses as well as the date of the analyses, is presented on the laboratory report rather than the cover page.

A list of consultants and their appended reports is contained in Appendix 1-6, Consultation and Coordination. Sources used in the preparation of the permit application are referenced in Appendix 1-3. References in all chapters are keyed to this main reference list.

Mining and exploration activities had been conducted in the currently proposed disturbed area prior to August 3, 1977. A road existed into C Canyon in 1952 when drill hole B-6 was drilled in the right fork. A road was also constructed up the left fork of C Canyon to a drill hole site during the same year. In addition to the drill holes, the coal outcrop in the left fork of C Canyon was exposed for sampling purposes. A small pad was built at the outcrop location and it was left in place as were the roads.

In 1986, another drill hole, 86-2, was drilled west of the first drill hole in the right fork. A minor amount of road work was done in conjunction with this second drill hole. Kaiser Coal Company obtained permission from the BLM to grade the existing road and make it passable for the drill rig. The drill hole site was reclaimed but the road, a public road, was left in place.

Through use of aerial photography and site evaluations, it is possible to document previous mining related disturbances in C Canyon. Refer to Map 5-1 for delineation of the disturbance prior to August 3, 1977.

The total of all the previously disturbed areas within the minesite disturbed area is estimated to be as follows:

roads in right and left forks	=	1.27 acres
road culvert	=	.05 acres
water monitoring well	=	.05 acres
material storage pad	=	.05 acres
		<hr/>
		1.62 acres

WEST RIDGE Resources, Inc. is proposing to utilize the entire previously disturbed area in their current proposal and to reclaim it upon cessation of mining operations.

In the 1950's a road was constructed in the Right Fork of Bear Canyon to access an exploratory drillhole site. This road now provides access to the site of the Bear Canyon GVH installation. (Refer to Appendix 5-14 for a detailed description of the Bear Canyon GVH facility)

**ATTACHMENT 1-5
VERIFICATION STATEMENT**

I hereby certify that I am a responsible official (Resident Agent) of the applicant (ANDALEX and IPA for WEST RIDGE Resources, Inc.) and that the information contained in this application is true and correct to the best of my information and belief in all respects with the laws of Utah in reference to commitments, undertakings, and obligations, herein

David Shaver, Resident Agent

Signed - Name - Position - Date

Subscribed and sworn to before me this__ day of____, 20__

Notary Public

My commission Expires: _____, 20__)

Attest: STATE OF _____) ss:

 COUNTY OF _____)

CHAPTER 5.....REPLACEMENT PAGES

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APPENDIX NUMBER	DESCRIPTION
APPENDIX 5-1	Reclamation Bond Calculations
APPENDIX 5-2	Letter from Carbon County Commission
APPENDIX 5-3	Resource Recovery and Protection Plan (R2P2)
APPENDIX 5-3A	Amended R2P2 Approval Letter (BLM)
APPENDIX 5-3B	BLM R2P2, Approval of Full Extraction of Panel #7
APPENDIX 5-3C	BLM R2P2, Approval of Longwall Panel Block 18 through 20
APPENDIX 5-4	Stability Evaluation for Construction and Reclaimed Slopes, West Ridge Mine
APPENDIX 5-5	Construction/Reclamation Plan
APPENDIX 5-6	Spill Prevention Control and Countermeasure Plan (SPCC)
APPENDIX 5-7	Pump House Reclamation and Sediment Control
APPENDIX 5-8	Letter Regarding Pre-Subsidence Survey (Mayo and Associates)
APPENDIX 5-9	Alternate Highwall Reclamation Plan
APPENDIX 5-10	SITLA Mine Plan Approval State Lease ML-47711, ML-49287 and ML-51744
APPENDIX 5-11	Grassy Trail Dam and Reservoir Mining - Induced Seismicity Report, Pre-mining Report (RB&G Engineering)
APPENDIX 5-12	Grassy Trail Dam and Reservoir - Phase II Dam Safety Study (RB&G Engineering)
APPENDIX 5-13	Grassy Trail Dam Monitoring/Inspection Plan, Panel #7
APPENDIX 5-13A	Grassy Trail Dam Monitoring/Inspection Plan, Panel Block #18-21
APPENDIX 5-14	Bear Canyon Gob Gas Vent Hole (GVH)

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(Continued)

<u>APPENDIX NUMBER</u>	<u>DESCRIPTION</u>
APPENDIX 5-15	Catchment Structure, C Canyon Drainage
APPENDIX 5-16	Grassy Trail Dam and Reservoir Mining-Induced Seismicity Summary Report, 2008
APPENDIX 5-17	Grassy Trail Dam and Reservoir Mining-Induced Seismicity Summary Update Report (RB&G Engineering, 2010)

R645-301-520

OPERATION PLAN

R645-301-521

GENERAL

WEST RIDGE Resources, Inc. holds federal, state and fee coal leases SL-068754 and UTU-75862, state leases ML 47711, ML 49287 and ML 51744, and the Penta Creek fee lease, totaling 7796.7 acres in the West Ridge area of eastern Carbon County. Much of the Penta Creek Fee Lease, is not included within the permit area at this time and cannot be mined until the permit is amended. Refer to Map 5-4B, Mining Projections - Extended Reserves.

The mine, consists of one longwall and two continuous miner sections. The mining sequence is shown on Map 5-4A, Mining Projections. Initial mine production will come from reserves located in the southeastern portion of the existing lease area. Panels will be developed to the north and south of the mains, progressing in an eastward direction. With the existing leases, the projected life of the West Ridge Mine is 15 years. After the economically recoverable reserves within the permit area have been depleted, the portals would be sealed and reclamation of the surface facility area would begin unless additional leases were acquired.

Surface facilities will be located in C Canyon, where the left and right forks converge, in a previously disturbed area. The extent of the previous disturbance includes access roads, outcrop excavations and exploration drill holes. Previous disturbance at this site is estimated to be approximately 1.62 acres. The total proposed surface disturbed area, as delineated by the tan line on the maps, amounts to approximately 29 acres. Actual anticipated disturbance for surface facilities and topsoil stockpiles (within the disturbance area) is estimated at 26.02 acres. This includes approximately 0.79 acres of Carbon County road which has been included in the disturbed area down to the C Canyon gate, and 0.23 acres for the pumphouse area located below the minesite.

An alternate (substitute) topsoil borrow area would be located about 1 ½ miles to the west of the proposed mine site on a ten acre parcel of State School Trust land. This area would not be included unless needed for final reclamation. No surface disturbance would take place at this location until the time of final reclamation. No additional acreage should be required for the project as proposed in this permit application.

or air pollution control facilities exist within the proposed permit area. A small portion of the Grassy Trail Reservoir (less than 0.6 acres) lies within a corner of the permit area.

521.130 Landownership And Right Of Entry Maps

Ownership boundaries and the names of the present owners of record for surface lands as well as underground are depicted on Maps 5-2, Surface Ownership and 5-3, Subsurface Ownership.

Map 5-4B delineates the federal coal lease SL-068754 and UTU-78562, state lease ML 47711, ML49287 and ML 51744 and the Penta Creek fee lease, totaling 7796.7 acres held by WEST RIDGE Resources, Inc., which is the area for which WEST RIDGE Resources, Inc. Resources has the legal right to enter and begin coal mining and reclamation operations. Much of the Penta Creek Fee Lease is not included within the permit area at this time.

Included in Appendix 5-2 is a letter from Carbon County granting WEST RIDGE Resources, Inc. permission to conduct mining operations within 100 feet of the Carbon County road. This would basically be that segment of road where the road enters the mine facility area.

Also included in Appendix 5-2 is an approval letter from Carbon County, allowing for the periodic closure of approximately 960' of the "C" Canyon Road from the gate to the original mine permit area. The permit area has been extended to the gate, as shown on Plate 4-1.

A public notice has been published providing for request for a public hearing as provided in R645-103-234. A copy of this notice is also included in Appendix 5-2.

521.140 Mine Maps And Permit Area Maps

The permit area proposed to be affected by the coal mining and reclamation operation is shown on Map 5-3. Permit renewals will be reapplied for on five year intervals.

521.141 The mining operation has been divided into five year mining blocks in an attempt to show future areas that will be mined under the permit renewals. The mining blocks are shown on Map 5-4B. All projections and timing are preliminary and general in nature and may change in the future depending on mining, marketing, environmental conditions and/or acquisition of additional state and federal reserves.

Surface support facilities in C Canyon will be utilized for the life of mine operations. The proposed mine surface facility area is depicted on Map 5-5, Surface Facility Map. Reclamation of the facilities will be performed following completion of mining activities and sealing of the portals.

mining. See Map 5B for mine projections and timing information for the future expanded mining area.

Major equipment for the mine will include:

Continuous Mining System:

Drum-Type Continuous Mining Machine
Shuttle Cars
Roof Bolter
Diesel Scoop Tractor
Feeder Breaker
Section Power Center
Section Auxiliary Face Ventilation Fan

Longwall Mining System:

Double Drum Shearing Machine
Armored Face Conveyor
Hydraulically Activated Shield Roof Support
Armored Stage Loader and Crusher
Longwall Power Center
High Pressure Hydraulic Pumping System

No surface coal mining (strip mining) will be done.

All mining will be done in accordance with the provisions of the approved R2P2 and the terms and stipulations of the federal and state leases within the West Ridge mining area. Stipulation 17 of federal lease UTU-78562 has been complied with. A seismic analysis report of the Grassy Trail Dam and Reservoir has been completed and BLM has determined that the seismic/subsidence effects of longwall mining on the Grassy Trail dam and reservoir have been satisfactorily addressed. The BLM has approved the R2P2 to allow full extraction longwall mining in panel #7. BLM has also approved longwall mining of panels 18, 19 and 20 on federal lease UTU-78562.

include: mining progress by date, dates of inspection, dates of any observed effects, and a description of effects.

If and when other means of monitoring subsidence in areas of heavy cover become available and are shown to have as good or better detection capabilities, WEST RIDGE will investigate utilizing the best technology available to conduct annual subsidence monitoring.

Mitigation

Mitigation measures may include: grading of damage resulting from subsidence on grazable lands (where accessible), fencing to restrict access (where necessary) and restoration of adversely affected roads and trails. Graded areas will be reseeded using a seed mix designated by the BLM.

525.130 State Appropriated Waters-Quantity and Use

Refer to Appendix 7-5 for all state appropriated water right within and adjacent to the permit area, including appropriated quantities and designated usage.

525.200 Subsidence Control

WEST RIDGE Resources, Inc. will adopt measures which are technologically and economically feasible to prevent subsidence under areas to be protected and to provide for planned controlled subsidence in all other areas. WEST RIDGE Resources, Inc. will comply with all provisions of the approved subsidence control plan.

Material damage resulting from subsidence will be corrected to the extent technologically and economically feasible. Where possible, the land will be restored to a condition comparable to the use it supported prior to subsidence.

Mining will not be conducted beneath or adjacent to public buildings, churches, schools, hospitals. None of these structures exist within or adjacent to the permit area. A small portion of Grassy Trail Reservoir (less than 0.6 acres) lies within a corner of the permit area. Grassy Trail Reservoir impounds more than 20 acre feet of water. However, there will be no mining or mining related subsidence below this reservoir.

The Grassy Trail Reservoir, which impounds more than 20 acre-feet of water, is located partially within and adjacent to the permit area. There will be no mining conducted beneath the reservoir or impoundment structure. As presently planned, Panel 7 is the closest longwall panel to Grassy Trail Reservoir, located approximately 995' from the reservoir measured horizontally. This panel is also 1664' below the reservoir at this point.

WEST RIDGE Resources hired RB&G Engineering to prepare a study of the risk to the Grassy Trail dam and reservoir from seismicity and subsidence associated with

longwall mining in the West Ridge Mine. This study involved collection of additional data from newly-installed accelerometers, subsidence monitoring stations, and piezometers in the area around the dam. This study was conducted with input from BLM, DOGM, Division of Dam Safety, and East Carbon City.

On August 5, 2005 RB&G Engineering completed the seismicity study. (Refer to Appendix 5-11, Grassy Trail Dam & Reservoir Mining - Induced Seismicity Report.) In addition, RB&G prepared a second report which analyzed the Grassy Trail Dam so that East Carbon City can comply with the regulatory requirements of Utah Division of Dam Safety. There are a number of overlapping and interconnected issues addressed in the seismicity study and the dam safety study. Therefore the dam safety study is included as Appendix 5-12 (Grassy Trail Dam & Reservoir, Phase II Dam Safety Study, August 27, 2005.)

After a thorough review of the study the BLM approved a minor modification of the R2P2 (see Appendix 5-3B) to allow full extraction longwall mining of Panel #7. In the approval BLM concluded that *"The submitted report from RB&G concludes that it is unlikely that the anticipated mining of panel 7 would impact the performance of the dam and reservoir. The analysis of seismic impacts used a large maximum event (3.9 Richter Scale Magnitude) which is well above any recorded event in the immediate area. Using the maximum event, RB&G still anticipates a factor of safety still well above minimum Utah State Dam Safety standards. The BLM accepts the report and agrees with the recommendations. West Ridge is hereby authorized to extract longwall panel #7 per the approved R2P2, having met the conditions for approval."*

The seismicity report addressed the issues of dam stability analysis, subsidence, internal erosion potential, reservoir seepage and landslide potential. The report concluded that "it is unlikely that the anticipated mining induced seismicity will impact the performance of the dam and reservoir." The report also recommended the following inspection and monitoring program during the longwall mining of Panel #6 and Panel #7:

- *Bi-weekly site reconnaissance to observe any change of conditions in the embankment crest or slopes and landslide areas. Particular attention should be given to cracking, ground deformation or seepage.*
- *Monthly measurement of inclinometers, piezometers and ground motion monitoring devices.*
- *Annual survey of control points on the embankment and in the landslide areas.*
- *Daily monitoring of the UUSS list of recent seismic events (www.seis.utah.edu/recactivity/recent.shtml) should be performed. A daily record should be maintained of the largest recorded event within 5 miles of the site. When an event greater than 3.0 occurs within 5 miles of the site, a*

site reconnaissance of the embankment crest, slopes and landslide areas should be performed within 24 hours and a review of ground motion recordings should be made. If recorded ground acceleration exceeds 0.4g, instrumentation readings should be performed.

- *Site reconnaissance and instrumentation reports should be forwarded to RB&G Engineering and the Utah State Dam Safety Engineer within 24 hours, and the daily monitoring record should be submitted on a monthly basis.*

The BLM R2P2 approval is conditioned upon WEST RIDGE Resources monitoring the inspection/monitoring program as outlined above. Therefore WEST RIDGE Resources, Inc. commits to implementing this inspection/monitoring program effective immediately upon Division approval for full extraction of Panel #7. This monitoring plan has been expanded to address concerns raised by Utah Division of Dam Safety (refer to Appendix 5-13).

Based on subsequent approval of the mine plan, panel #7 was extracted starting in December, 2005, and completing in September 2006. Extraction closest to the Grassy Trail Reservoir occurred in March, 2006. Monitoring, as described above, was conducted continuously during the mining of panel #7. As predicted by the RB&G report, there was no mining related damage to the dam, although some slumpage of the adjacent hillside occurred, resulting in minor movement of the west abutment of the dam. There was no loss of integrity of the earthen structure of the dam. In January, 2008, after the area above and adjacent to panel 7 had completely stabilized, RB&G Engineering prepared a post-mining Summary Report of the mining-induced seismicity. This report is included in Appendix 5-16.

After panel 7 was completed, longwall mining moved to the west side of the mains near the outcrop (more than two miles distant from the dam), and then proceeded to the northeast. Also during this time, the company went to a panel-barrier system of longwall extraction, replacing the previous side-by-side panel method. This panel-barrier system leaves a 400' wide solid barrier pillar between each longwall panel, and has significantly reduced the magnitude and frequency of mining-related seismic events. During the ensuing five years of mining, the company has continued to monitor the dam and reservoir. Results of this monitoring have been provided to all the regulatory agencies and the owners of the reservoir on a regular basis. The results of this monitoring have shown that all mining-related effects on the reservoir have stabilized. RB&G Engineering then, in September, 2010, prepared a summary report of the subsequent mining-induced seismicity, and this report is included in Appendix 5-17.

On July, 21, 2010, BLM approved the R2P2 for federal lease UTU-78562 and approved mining of panels 18, 19 and 20 on the east side of the mains in the vicinity of the Grassy Trail Reservoir. In the decision document, BLM states, *"We agree with the conclusion that mining longwall panels 18 through 20 as submitted should have no adverse effects on the dam structure or reservoir. The dam structure has seen no*

detectable affects from the mining of panel number 7. The proposed panels are further distant from the reservoir and much further from the Grassy Trails Reservoir dam. Also, the new panel-barrier design has reduced dramatically the amount and intensity of any mining induced seismicity or subsidence. Additionally, this mining plan will comply with the lease stipulation to not subside perennial streams, unless authorized, as the Left Fork Whitmore Canyon Stream will be under a barrier pillar and no full extraction mining is planned under the stream." A copy of the approved R2P2 for panels 18-20 is included in Appendix 5-3C. As with the previous mining of panel 7, the company commits to conducting the same level of intensive monitoring of the dam during mining of panel block 18-20, as previously approved by the regulatory agencies, as stated above. This monitoring plan has been updated for panel block 18-21, and is included in Appendix 5-13A.

As mentioned in the BLM approval letter, mining of panel block 18-20 will be further distance away from the Grassy Trail dam than with panel 7. Panel 7 mined within 995' (horizontal) from the dam, while the closest mining from Block 18-20 would be more than 3000' (horizontal) away. Also, panel 7 was about 1664' stratigraphically lower than the dam, while panel block 18-20 is located more than 2200' lower than the dam. The hypocentral distance of panel 7 was 1939' from the dam, compared to 3723' for the closest distance for panel block 18-21. Also, panel 7 was mined using side-by-side panels, whereas panel block 18-20 will be mined as panel-barrier, further reducing the potential for seismicity.

In the 2005 approval of Panel 7, BLM added a special stipulation #17 to the federal lease related specifically to the Grassy Trail Reservoir, stating, "*The Lessee is and will remain liable for any and all damages or hazardous conditions resulting from the mining operations under the lease.*" This new 2010 BLM approval for panel block 18-20 contains reference to this same lease stipulation #17. It should also be noted that, as with previous mining of panel 7, the Utah Division of Dam Safety will have authority to stop any longwall mining of panel block 18-21 if it determines that mining-related seismicity or subsidence is creating, or has created, an unacceptable level of risk to the Grassy Trail dam or reservoir, based on monitoring at the time.

525.300 Public Notice of Proposed Mining

No coal mining will be conducted under any buildings, facilities or impoundments (other than the recreational cabin referred to in 521.120). The BLM will be kept informed as to the dates and locations of mining activities. All owners of surface property and structures (BLM) above the underground works will receive notification at least six months prior to mining of the specific areas in which mining will take place, dates of mining and the location at which the subsidence control plan may be examined.

525.480 State Appropriated Water Replacement Mitigation

CHAPTER 7.....REPLACEMENT PAGES

NOTE TO REVIEWERS:

ENTIRE CHAPTER 7 TEXT IS TO BE REPLACED
DUE TO PAGINATION CHANGES

~WEST RIDGE MINE - PERMIT APPLICATION PACKAGE~

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Historical Note: In the spring of 2009, and again in the summer of 2010, the company constructed small catchment structures in the C Canyon drainage below the minesite. The purpose of these structures was to contain coal-fines which had accumulated in the drainage channel as a result of non-compliance discharge water from the mine, and to assist in the subsequent clean-up project. Please refer to Appendix 5-15 for a complete description of these catchment structures, including history, location, right-of-entry, as-built design, operational criteria, and reclamation information.

R645-301-711 General Requirements

This chapter includes a description of hydrology and hydrogeology of the West Ridge permit area. Specifically, this permit application includes:

- 711.100 Existing hydrologic resources according to R645-301-720.
- 711.200 Proposed operations and potential impacts to the hydrologic balance according to R645-301-730.
- 711.300 The methods and calculations utilized to achieve compliance with the hydrologic design criteria and plans according to R645-301-740.
- 711.400 Applicable hydrologic performance standards according to R645-301-750.
- 711.500 Reclamation activities according to R645-301-760.

NOTE: The following discussion for the remainder of R645-301-711 applies specifically to the Gob Gas Vent Hole (GVH) installation proposed in Bear Canyon. In order to facilitate the review it is presented here in its entirety rather than interspersed throughout the chapter. A more detailed and complete discussion of the Bear Canyon GVH proposal can be found in Appendix 5-14. Unless specifically noted in this following discussion, nothing related to the Bear Canyon GVH proposal affects the contents of the existing approved MRP as described hereinafter.

The GVH site will be located on the opposite side of the road (southeast side) from the primary canyon drainage channel. Therefore, construction and operation of the GVH facility will have no affect on the natural canyon drainage. Because of the limited size of the site (0.24 acres) and the narrow configuration within the confines of the narrow ledges of the canyon, there is insufficient room to construct a sediment control pond. Therefore the company intends to employ a combination of alternate sediment control methods at the site. During the construction phase of

the pad site, adequate rows of excelsior logs will be placed downgrade from the site to prevent construction sediment from entering the channel. Once the pad site is finished, which should take less than two weeks, a disturbed area drainage ditch will be constructed along the toe of the cut. This ditch will be designed to handle the flow from the up-slope undisturbed area, the reclaimed cutslope, the drillpad, and the adjacent section of road. This ditch will discharge into the natural drainage channel a short distance below the drillhole location. This ditch will be armored with adequately-sized rip-rap for its entire length. This rip-rap will decrease the potential for erosion in the ditch, and will also act initially as a siltation trap as a certain amount of sediment is allowed to settle into the rip-rap voids.

The total length of the drainage ditch will be approximately 350'. At 50' intervals along its length energy dissipaters will be installed in the ditch. These energy dissipaters will consist of excelsior logs laid in the ditch perpendicular to the flow direction, and anchored securely with stakes. These dissipaters will reduce the flow velocity to help reduce erosion, and will also serve as siltation filters to help remove sediment prior to reaching the natural channel. In addition, a terminal set of excelsior logs will be installed in the ditch immediately above the point where it discharges into the natural channel. The installation, consisting of four (4 ea.) closely-spaced rows of excelsior logs will serve primarily as sediment traps, rather than energy dissipaters. This set will be located conveniently close to the road to facilitate regular cleaning and maintenance. The sediment traps will be inspected routinely to make sure they are functioning properly. There will be mine personnel attending to the GVH units on a daily basis, and will be instructed to check the sediment traps on a regular basis, and especially after storm events. If they are in need of repair and/or cleaning such maintenance will be done immediately. Sediment cleaned from the traps will be hauled off-site and disposed of at an approved facility, such as the permitted Wildcat Loadout Coal Mine Refuse Disposal Site (DOGM permit C/007/033). All excelsior logs will be installed according to the manufacture's instructions.

Immediately after the cutslopes have been excavated to create the pad-site, the slopes will be pocked, and reseeded. A layer of woodstraw will then be spread over the reseeded slopes. This straw serves to not only provide microclimate conditions to encourage seed germination, it also absorbs some of the energy from falling raindrops, and therefore helps control erosion on the slopes until revegetation can become established. The pocking, which consists of irregular depressions measuring about 24" x 36" x 18" deep, helps revegetation by holding the seed and water in place, and thereby helps minimize erosion as well.

During the drilling phase of the GVH installation, the pad area will be used as an equipment lay-down area for drill steel, drill casing, drilling mud, concrete, etc. The pad will also be used to accommodate the mud pits needed during the drilling operation. The mud pit will measure approximately 30' long x 10' wide x 10' deep, and will be located immediately down-canyon, i.e., southwest of, the

drillholes, as shown in Attachment 1. The pit will be lined with a 12 mil plastic liner, with a 20 mil felt underlayment. Based on the diameter and total combined length of the drillholes, and assuming a swell factor of 40% for the cuttings, the estimated volume of cuttings is 1283 cubic feet, or 47 yds. This would result in a total depth of cuttings remaining in the bottom of the pit of about 4.28 ft. After the drillholes have been completed the remaining cuttings will be mixed with native material until it can be handled with heavy machinery. It will then be removed from the pit and hauled off-site to an approved disposal facility. After the cuttings have been removed, the pit will be backfilled and eliminated. The site will then be cleaned up and fine-graded prior to installing the methane extractor units (see Attachments 1 and 7 for details). A period of approximately two weeks will be required to construct the drillpad and to drill the holes. During this time interim sediment control will be provided by several rows of excelsior logs installed at the lower end of the construction site. Sediment is not expected to be a problem because of the short construction time involved (approx. 2 weeks), the low probability of rainfall events in late November at this elevation, and the temporary installation of the excelsior logs.

After the site has been constructed the entire operational pad area, as well as the adjacent road area and turnaround, will be graveled from the channel crossing up to the end of the road. This gravel will consist of a crushed rock 1.5" x 0" road base material, laid down and then compacted to a tight surface. This graveled surface will also serve to reduce erosion on the pad (and adjacent road segment) and thereby decrease sedimentation to the natural drainage.

In summary, the site will be an alternate sediment control area. Sediment will be controlled by the following combination of treatment methods:

- 1) Armoring the entire length of the drainage ditch with rip-rap.
- 2) Installation of energy dissipaters within the ditch to slow the flow velocity.
- 3) Installation of set of sediment control excelsior logs in the ditch ahead of the discharge point.
- 4) Pocking and revegetating the cutslope, including a layer of protective wood straw.
- 5) Graveling the pad-site and adjacent roadway

Refer to the site plan in Attachment 1 of Appendix 5-14 for the location of the drainage ditch, energy dissipaters, excelsior log siltation controls, and graveled area. See Attachment 11 of Appendix 5-14 for the drainage control calculations determined by Blackhawk Engineering. This report concludes that with

"...installation of the proposed sediment and erosion controls, there should be no adverse effects to the surface hydrology of this area."

The GVH installation and operation should have no adverse affect on ground-water hydrology. The GVH site is located close to the area where the depth of cover over the longwall panels is the shallowest within the permit area. As a result, this area has been an area of interest in previous MRP amendments, resulting in enhanced water monitoring and subsidence monitoring requirements both above and below the GVH site. A more detailed discussion of the area hydrology can be found in R645-301-322.100 and R645-301-738 of the approved MRP. It should be noted that this area has been now been completely undermined since November, 2006, subsidence has stabilized, and no adverse affects to underground or surface hydrologic resources have been observed. Prior to final reclamation, all drillholes will be plugged and sealed in accordance with State and Federal regulations, as discussed in the Chapter 5 section of Appendix 5-14. See Attachment 10 of Appendix 5-14, prepared by Petersen Hydrologic, for a discussion of the potential hydrologic affects from the GVH installation and operation. This report concludes that "adverse impacts to the hydrologic balance resulting from the installation and operation of the Bear Canyon GVH system are not anticipated." The probable hydrologic consequences (PHC) section of the MRP (645-301-738) has been updated to include a discussion of the Bear Canyon GVH installation.

During drilling operations, as well as during the remainder of the operational life of the GVH installation, noncoal mine waste will be stored in suitable containers, and then disposed of off-site at an approved waste disposal facility. Hydrocarbons, including Diesel fuel, gasoline, oil and grease, will be stored in the factory supplied containment mounted within the machinery. If any stand-alone storage tanks are used they will be equipped with built-in containment capable of holding the entire contents of the tank. Absorbent pads and bags of absorbent granules will be kept on hand during the drilling operation, and later during the GVH operation, to be used in case of a spill of oil, fuel or grease. Used absorbent material will be disposed of at an approved disposal facility. All operations will be subject to the current Spill Prevention Control and Countermeasure Plan (SPCC) for the West Ridge Mine currently on file with the Division, and included in Attachment 14 for ready reference.

Prior to final reclamation, all drillholes will be plugged and sealed in accordance with State and Federal regulations, as discussed in the Chapter 5 section above. Upon final reclamation, any portion of the gravel surface that is stained or contaminated in any way with hydrocarbons will be dug up and hauled off the site to an approved waste disposal facility. After removing any contaminated gravel, the pad area and cutslopes will then be backfilled to approximate original contour, using fill material obtained from the adjacent roadway and leveling pads, and covering up the diversion ditch and the remaining gravel in the process. The slopes will then be re-topsoiled. The surface will then be pocked and re-seeded

with an approved seed mix as described in the Chapter 2 discussion. A layer of wood straw will also be spread over the reclaimed slopes to help minimize erosion, and promote vegetation growth. After the reclaimed slopes have been topsoiled and reseeded, a row of excelsior logs will be installed along the full length of the toe of the slope between the slope and the remaining road, as shown on the Reclamation Plan, Attachment 1. The purpose of this row of excelsior logs is to control sediment off the site until the revegetation has become established. These sediment control logs will remain in place until vegetation has been established adequate for Phase 2 bond release.

R645-301-712 Certification

All cross sections, maps, and plans have been prepared per R645-301-512.

R645-301-713 Inspection

Impoundments will be inspected as described under R645-301-514.300.

R645-301-720 Environmental Description

R645-301-721 General Requirements

The existing, pre-mining hydrologic resources within the permit and adjacent areas that may be affected by coal mining and reclamation operations are described by Mayo and Associates (1997; 7-1 "Groundwater Investigation of Proposed Mine Permit Area", 2001; 7-1A "Investigation of Surface-Water and Groundwater Systems in the Whitmore LBA Area") and summarized below.

Groundwater Resources

A spring and seep survey of the West Ridge area was conducted in 1985-86 by Kaiser Coal Corporation (1986) as shown in Appendix 7-6. Additional seep and spring survey data from the northeastern part of the project area was collected later in 1999 and 2010, as shown in Appendix 7-6A. Locations of the springs and seeps in this area are shown on Map 7-6 "Hydrologic Monitoring Map (Historical Monitoring Locations)". No water supply wells exist in the permit and adjacent areas.

Within the permit and adjacent areas, groundwater naturally discharges from alluvium and colluvium, and the Colton, North Horn, and Price River Formations. Over 90% of springs in the permit and adjacent areas issue either from alluvium/colluvium or the Colton and North Horn Formations, which form the caprock of nearly the entire permit area. Springs that issue from the Price River Formation are uncommon. Groundwater does not naturally discharge from the Castlegate and Blackhawk Formations within the permit and adjacent areas. However, groundwater occurs in some permeable horizons of the Blackhawk Formation. Most notably, groundwater is present in well DH86-2, which is open to the entire thickness of the Sunnyside Sandstone member of the Blackhawk Formation.

Springs that discharge from alluvium and colluvium and the Colton and North Horn Formations on the east slope of West Ridge in Whitmore Canyon contribute base flow to Grassy Trail Creek. Discharge from springs on the west side of West Ridge is small and is consumed by evapotranspiration and infiltration before reaching perennial streams.

Surface Water Resources

The mine permit area drains into Grassy Trail Creek via two principal drainages. The region east of West Ridge and west of Patmos Ridge drains into Grassy Trail Creek through Whitmore Canyon. Numerous small ephemeral creeks drain the western face of West Ridge and flow westward toward lower Grassy Trail Creek. Grassy Trail Creek ultimately discharges into the Price River near Woodside, Utah, approximately 20 miles to the south.

R645-301-722**Cross Sections and Maps**

- 722.100 As described by Mayo and Associates (1997; Appendix 7-1, 2001; Appendix 7-1A), groundwater systems in the permit and adjacent area have limited areal and vertical extent due to the heterogeneous lithology of the rock units containing and overlying the coal-bearing strata. No aquifers exist in the permit and adjacent areas. Therefore, no map has been prepared to show the location and extent of subsurface water.
- 722.200 The location of surface water bodies can be found on Map 7-3 "Water Rights", which shows Grassy Trail Reservoir and its location with respect to the permit area.
- 722.300 Baseline monitoring stations are shown on Map 7-6 "Hydrologic Monitoring Map (Historical Monitoring Locations)". This map shows the stations that were utilized to collect historical baseline information in earlier monitoring programs conducted between 1985 and 1996.
- 722.400 The location of water wells is also shown on Map 7-6. DH 86-2 was monitored during 1986, 1987, 1997 and 1998.
- 722.500 Map 5-1 shows contours of the proposed disturbed mineyard area.

R645-301-723**Sampling and Analysis**

Water quality sampling and analyses have been and will be conducted according to the "Standard Methods for the Examination of Water and Wastewater" or EPA methods listed in 40 CFR Parts 136 and 434. Laboratory reporting sheets indicate the specific method used for each parameter.

R645-301-724**Baseline Information**

Baseline groundwater, surface water, geologic, and climatologic data are described by Mayo and Associates (1997; 7-1, 2001; 7-1A).

724.100 Groundwater Information

The location of wells and springs are shown on Map 7-5, Seep/Spring Survey Map, and 7-6, Hydrologic Monitoring Map (Historical Monitoring Locations). Groundwater rights in and around the permit and adjacent areas are shown on Map 7-3 and tabulated in 7-5 "Water Rights Summary".

Kaiser Coal Company (a previous owner of the WEST RIDGE lease area) had identified and proposed monitoring for several other springs in the region. Review of their 1986 permit application to DOGM was interrupted by the sale of the coal leases to BP America in 1987. BP America retained JBR Consultants to proceed with baseline water monitoring. JBR Consultants renumbered previously monitored points into a different numbering system. In places of this WEST RIDGE Permit Application Package (such as Appendix 7-1, Table A-1) a cross-reference is made between the previous (Kaiser) spring numbers and the present (JBR) labels. Mining plans for both Kaiser Coal and BP America included a larger mining area. When WEST RIDGE acquired the property they did not acquire a portion of the coal lease area referred to as the north area. Therefore, in the WEST RIDGE PAP, those monitoring points that were north of Bear Canyon were eliminated from the baseline monitoring plan due to their distance from the current proposed mine workings and the low potential to be impacted by mining operations.

SP-1, SP-2 and SP-3 were spring monitoring points used by Kaiser Coal during the mid-1980's. These three points were located in Rock Canyon, several miles to the north of the WEST RIDGE permit area. They were eliminated from the monitoring program because they are quite a distance from the permit area and would not be affected by the WEST RIDGE mining operations.

Also, SP-4 and SP-5 (referred to in the Kaiser plan as S-40 and S-39) were eliminated from the monitoring plan because they occur about a mile north of Bear Canyon and are separated from the proposed mining area by several large drainages. The likelihood of impact to these sites is negligible since WEST RIDGE did not acquire coal leases in this area. SP-4 and SP-5 were monitored in 1988 and 1989 and found to be dry. These sites have been added to Map 7-6 for reference to historical monitoring locations.

SP-7 (Kaiser point S-22) is located about ½ mile north of the permit area. It was not included in the baseline monitoring program because access is poor and, during previous monitoring in the spring of 1986, flows were low (1-3 gpm). When this site was re-checked in 1988, 1989 and the fall of 1997 no flow could be found in the vicinity of the old spring. SP-10 (Kaiser S-1) is in the lower right-hand corner of the permit area was also eliminated from the baseline monitoring plan because of difficulty of access and low previous flow measurements. This site was also revisited in 1988, 1989 and 1997 and no flow or dampness could be located. No water rights exist on SP-4, SP-5, SP-7 or SP-10. SP-7 and SP-10 are included on Map 7-6 for reference to historical points.

Seasonal quality and quantity of groundwater and usage is described in the 1985-86 spring and seep survey (Appendix 7-6) and WEST RIDGE Resources, Inc.'s baseline monitoring during 1997 (Appendix 7-2 "Baseline Ground Water Monitoring & Analyses"). These data have been analyzed by Mayo and Associates (1997; Appendix 7-1, 2001; Appendix 7-1A).

Drill Hole 90-1

DH90-1 was developed as a water supply well by Sunnyside Coal Company, East Carbon City, and Sunnside City. Sunnside City and East Carbon City have a water right (91-4960) for 31.621 ac-ft per year (19.6 gpm) from this well.

Information for the state engineer's office in Price (Mark Page, Personal Communication) indicates that the well has a total depth of 500 feet. The well has a gravel pack from 207 to 500 feet below ground surface. According to Sunnyside Coal Company (1993), the well is completed in the Price River and North Horn Formations.

Because the well is located two thirds of a mile from the lease boundary, and is completed in the Price River and North Horn Formations, it is very unlikely that mining in the permit area will affect groundwater systems that contribute water to DH90-1.

Surface Water Information

The location of streams, reservoirs, and stock watering ponds are shown on Map 4-1. Surface water rights in and around the permit and adjacent area are shown on Map 7-3 and tabulated in Appendix 7-5 "Water Rights Summary".

WEST RIDGE Resources, Inc. anticipates that as mining progresses, it may become necessary to discharge water from the proposed mine. Mine water will be discharged to the ephemeral drainage in C Canyon. The location of the mine discharge point is shown on Maps 5-5 and 7-2, Mine Site Drainage Map.

Surface water quality and quantity is shown in WEST RIDGE Resources, Inc.'s baseline monitoring data (Appendix 7-3 "Baseline Surface Water Monitoring & Analyses") and is described in detail by Mayo and Associates (1997; Appendix 7-1, 2001; Appendix 7-1A). Additional surface and groundwater baseline data has been added to Appendix 7-1, Table A-1. Monitoring records from Kaiser Coal Company have been located and added to the data base. This includes monitoring of surface sites on ephemeral drainages around the area.

As described in R645-301-728.320, no acid drainage is expected from the proposed mining operation.

Upper Grassy Trail Creek Drainage

Most of the surface water flowing into Grassy Trail Creek in Whitmore Canyon above Sunnyside discharges from several ephemeral streams located on the western slopes Patmos Ridge (1998 Mayo and Associates report, Figure 15). These streams include Number Two Canyon, Pasture Canyon, Pole Canyon, Bear Canyon, Water Canyon, the Right and Left Forks of Whitmore Canyon, Graveyard Canyon, Hanging Rock Canyon, and Spring Canyon. No major streams flow into Grassy Trail Creek in Whitmore Canyon from the eastern slope of West Ridge due to the asymmetry of the ridge. Discharge in Grassy Trail Creek in Whitmore Canyon is regulated at Grassy Trail Reservoir.

Side tributaries to Grassy Trail Creek along the western slope of Patmos Ridge are characterized by steep gradients (greater than 25%), narrow canyons, and gravel streambeds with sand and silt where gradients are reduced. Tributary flow is intermittent and in response to precipitation events.

Above the reservoir, Grassy Trail Creek lies in a relatively broad canyon (30 to 100 yards wide) with a low gradient (3 to 4%). The channel bottom locally consists of boulders, gravel, sand, or mud. The Right and Left Forks of Grassy Trail Creek lie in narrow canyons with steep gradients. The Utah Supreme Court has determined that Grassy Trail Creek is an intermittent stream (Decree #3028). During wet periods, base flow above the reservoir is sustained by high elevation springs, mostly in the Colton Formation. During dry years, there is no sustaining groundwater baseflow to support flow in the creek. Below the reservoir Grassy Trail Creek is now a perennial stream due to the buffering effect of the reservoir.

Monitoring stations on Grassy Trail Creek have been established at ST-3, which is above Grassy Trail Reservoir near Hanging Rock Canyon, and below the reservoir at ST-8 near the confluence with Water Canyon (Mayo and Associates 1998 report, Figure 16). During May, June, August, and October of 1997, Andalex made stream flow measurements at these locations. On average, discharge between ST-3 and ST-8 increases by about 200 gpm during this time. In June, However, flow increased between these two stations by 1,700 gpm. We suspect that this increase is the result of surface water inflows from ephemeral side drainages during the snowmelt period.

Visual observations during low-flow stream conditions suggest significant base flow gains in the reach between the reservoir and the mouth of Whitmore Canyon. Mayo and Associates observed Grassy Trail Creek between the confluence with Water Canyon and the mouth of Whitmore Canyon on 21 November 1997. The results of the observations are presented below.

<u>Location</u>	<u>Discharge (gpm)</u>
Confluence with Water Canyon	150 ¹
Base of Blue Gate Sandstone	298
Mouth of Whitmore Canyon	275 ¹

¹ Estimated values; the channel was frozen over and measurements were not possible.

Discharge in Grassy Trail Creek doubled in the reach from the confluence with Water Canyon (alluvium overlying North Horn Formation) to the base of the Bluecastle Member of the Price River Formation. Much of the increase comes from several small springs and seeps, which visibly discharge from the stream bank into the creek. In the reach from below the Bluecastle Member to the mouth of Whitmore Canyon flow remained relatively constant. Most of the increase in flow occurs as the stream flows over alluvial and colluvial deposits. The canyon widens substantially in this reach and the alluvial deposits appear to be thicker than in the higher elevations in the canyon. The increase in stream flow is likely the result of delayed drainage from the alluvial and colluvial deposits. However, it is possible, though less likely, that the increase in flow is the result of groundwater leakage from permeable sandstone horizons in the Price River Formation.

No increase in discharge in Grassy Trail Creek is observed as the creek flows over the Blackhawk Formation near the mouth of the canyon. This suggests that there is no appreciable discharge from the Blackhawk Formation to the creek. This finding is in agreement with many other stream gain-loss measurements performed by Mayo and Associates in the Book Cliffs and Wasatch Plateau coal fields.

In the mouth of Whitmore Canyon, streamflow in Grassy Trail Creek is lost to the alluvial sediments associated with the Mancos Shale. Waddell (1981) reports that the composition of groundwater in the alluvium near the mouth of Whitmore Canyon in Whitmore Spring (D-15-13)1ddc-S1 and well (D-15-13)2 dad-1 have solute compositions and TDS concentrations that are similar to those in lower Grassy Trail Creek. This suggests that the creek and the thick alluvial deposits in the mouth of the canyon are probably in good hydraulic connection. Several springs with discharges of less than 10 gpm discharge from the alluvium near the mouth of the canyon. These springs are likely recharged from leakage from Grassy Trail Creek. During dry periods, Grassy Trail Creek dries up completely before reaching the confluence with Bear Creek and Rock Canyon Creeks west of the permit area. The reduction of flow in the creek in this reach is due primarily to infiltration into the thick alluvium and to losses to evapotranspiration.

Water Rights

Water rights on Grassy Trail Creek are shown on Map 7-3 and tabulated in Table 7-5.

Water Quality

Surface water in upper Grassy Trail Creek is of the magnesium-calcium-bicarbonate type with considerable concentrations of sodium and sulfate. Average TDS concentrations are approximately 350 mg/l at ST-3 and 277 mg/l at ST-8. Below the confluence with Water Canyon Creek, the TDS and chemical character of Grassy Trail Creek changes. The TDS steadily increases to about 1,000 mg/l. Na^+ becomes the dominant cation and there are also substantial increases in SO_4^{2-} and HCO_3^- .

Bear Canyon Drainage

Flow Characteristics

The discharge from the Bear Canyon drainage (which is tributary to Dugout Creek) is described as ephemeral in the Mayo and Associates report (p. 53). However, historical monitoring location ST-2 in the left fork of Bear Canyon is considered an intermittent stream monitoring site (Mayo and Associates report, page 52).

Flow in the upper reach of the left fork of Bear Canyon is intermittent for about 500 feet. Water in this upper reach is supported by intermittent discharge from a spring complex (including historical monitoring location SP-6). Intermittent flow is not sustained below this stretch of the drainage due to infiltration and therefore does not reach the LBA boundary.

Data from monitoring sites ST-4 and M-2 indicate that discharge from the Bear Canyon drainage is ephemeral. In May 1988, no flow was observed at M-2 (refer to Table A-1). The PHDI (Figure 3a and 3b) indicates that 1988 was not a drought year. No flow was observed at ST-4 during 1989; however, this year was the beginning of a drought period in the region. At ST-4, no flow was observed in the drainage in March, May, June, July, August or September 1997, or May, June, July, August or September 1998.

M-1 (ST-1) was a monitoring point used by Kaiser Coal during the mid-1980's. The point was identified as M-1 by Kaiser Coal in their 1986 permit application package. It was later redesignated as ST-1 by JBR Consultants in a monitoring plan later submitted for BP America. This point was located in Rock Canyon (approximately 2 miles to the northwest of the WEST RIDGE permit area in T. 13 S. R. 13 E. Section 32 NW1/4 SW1/4 on Rock Creek. When WEST RIDGE (Andalex) took over the monitoring program in 1997, they decided to utilize the same numerical designations of the monitoring points to minimize confusion over numbering and to maintain continuity in the baseline monitoring plan and facilitate utilization of previously collected hydrology information. Rock Creek was not included in the baseline monitoring plan for the WEST RIDGE mine because of the distance from the lease area and the low potential for mining operations to have any impacts. However, rather than renumbering the stations and causing confusion, it was decided to leave the existing numbering scheme in place but sample only those site important to the current mining proposal. The WEST RIDGE monitoring program does not include ST-1 and this point is not shown on the operational monitoring map (Map 7-7).

Water Rights

Surface water rights (91-1717 and 91-1722) for the intermittent reach of the left fork of Bear Creek have a period of use of March 15 to October 31. Data from ST-2 indicate that water is available in the upper left fork during this period in normal to wet years. During dry years, this stretch is dry.

All other surface water rights for Bear Creek below the intermittent reach have a year-round period of use. However, as discussed above, all of Bear Creek below the headwaters of the upper left fork only supports ephemeral flow.

Water Quality

Surface water at ST-2 is a Mg^{2+} - HCO_3^- - SO_4^{2-} type water with elevated TDS (1,100 mg/l) relative to surface water in upper Grassy Trail Creek. Only one surface water sample has been collected at the ephemeral monitoring location M-2. This water had a TDS of 1,820 mg/l indicating that the quality of water naturally degrades between ST-2 and M-2.

Hydrologic Resources of the Topsoil Borrow Area.

The 9.6 acre area identified as the topsoil borrow site is a gently, westward sloping bench. The surface is covered with sagebrush and pinyon juniper. No seeps or springs exist in or around the borrow site. What little surface runoff occurs would flow to ephemeral drainages downstream from the borrow site. Surface runoff is minimized by the vegetative cover and relatively deep soil horizons in this area. Due to the limited areal extent of the borrow area, it does not appear to contribute a significant amount of runoff to adjacent drainages. There are no known aquifers in this area that would be recharged by this watershed area.

During reclamation, if it is determined that topsoil resources from this potential borrow site are needed to achieve reclamation of the mine site, silt fencing would be placed around the outer limits of the borrow area to be disturbed. Topsoil would be stripped and stockpiled. The required amount of topsoil would then be removed from the borrow site. Care would be taken to contour the borrow pit such that runoff would be utilized to the fullest extent in the disturbed area. This would include gouging the regraded surface with pits approximately 24" wide, 36" long and 18" deep as well as sloping the regraded slopes inward to encourage precipitation infiltration on-site.

724.300 Geologic Information

Geologic information in sufficient detail to determine the probable hydrologic consequences of mining and determine whether reclamation can be accomplished, as required by R645, is provided in Chapter 6 of this permit application package and in Mayo and Associates (1997; Appendix 7-1, 2001; Appendix 7-1A).

724.400 Climatological Information

724.411 Seasonal precipitation

Average annual precipitation at Sunnyside is 13.3 inches (NCDC, 1997) while estimated potential evaporation is over 60 inches (Sunnyside Coal Company, 1993). Mean monthly precipitation at Sunnyside is shown on Figure 7-1 "Hydrologic Monitoring Protocols and Locations". On average, the area receives the greatest quantity of moisture in the late summer and early fall (August-October). The driest months are November to February.

The precipitation and temperature data described above is typical of the lowland areas at the base of the Book Cliffs. Although data are not available for the higher elevations of the permit area, average precipitation likely increases and average temperatures likely decreases with elevation.

The Palmer Hydrologic Drought Index (PHDI; NCDC, 1997; Karl, 1986; Guttman, 1991) indicates long-term climatic trends for the region. The PHDI is a monthly value generated by the National Climatic Data Center (NCDC) that indicates the severity of a wet or dry spell. The PHDI is computed from climatic and hydrologic parameters such as temperature, precipitation, evapotranspiration, soil water recharge, soil water loss, and runoff. Because the PHDI takes into account parameters that affect the balance between moisture supply and moisture demand, the index is a useful for evaluating the long-term relationship between climate and groundwater recharge and discharge. Figures 7-2 Palmer Hydrologic Drought Index for Utah Division 6 and 7-3 Palmer Hydrologic Drought Index for Utah Division 7 show the PHDI for Utah Division 6 (Uintah Basin) and Division 7 (Southeastern Utah), respectively. The permit area lies at the boundary of these two regions. These graphs indicate extremely wet years between the early and late 1980s, followed by several years of drought in the late 1980s and early 1990s. Since about 1993, wet and dry cycles have been shorter.

724.412 Winds direction and velocity

Wind data have been collected by SCA (Sunnyside Cogeneration Associates) during 1982 and 1983 for permitting of the power plant. These data (Sunnyside Coal Company, 1993) were collected in Dragerton (near East Carbon, Utah) atop a 45-meter tower. The data show that the majority of the winds are from the north-northeast clockwise through the south-southwest. The average annual wind speed is 6.2 mph.

Upper level winds, over 1,600 feet above the ground level, are generally from the southwest during most of the year. During the winter, air flow from the northeast is common. Local airflow patterns are primarily influenced by stream and river drainages. Wind speeds induced by the descent of dense cold air is generally light. The daytime flow is strongly influenced by surface heating effects which result in mixing between surface and upper level flows. In the permit area there is a general air flow toward the north and northeast during the day (high elevations) and toward the southwest (lower elevation) during the night. Wind speeds are usually light to moderate (below 20 mph). Higher wind speeds are generally associated with storm systems and higher elevations such as ridge tops.

724.413 Seasonal temperature ranges

Temperatures in the permit area vary greatly both daily and seasonally. Temperature data collected at the Sunnyside Mine engineering office (Sunnyside Coal Company, 1993) indicate that average temperatures are generally below freezing in the winter months and summertime temperatures range from 50 - 90°F.

724.500 Supplemental Information

Adverse impacts to the hydrologic balance either on or off the permit area are not expected to occur based on the probable hydrologic consequences determination in R645-301-728. Acid- and toxic-forming materials present in mining materials will not cause contamination of groundwater or surface-water supplies. Consequently, information regarding remedial and reclamation activities has not been prepared.

724.600 Renewable resource lands

Aquifers or areas for the recharge of aquifers do not exist within the permit and adjacent areas. As described by Mayo and Associates (1997; Appendix 7-1), groundwater systems in the permit and adjacent area have limited areal and vertical extent due to the heterogeneous lithology of the rock units containing and overlying the coal-bearing strata.

Limited groundwater recharge occurs on the land surface within the permit area because of the steep slopes and cliffs. Springs that discharge in the permit area are most likely associated with shallow alluvial and colluvial materials. Mining should not affect the recharge or discharge of these springs. Groundwater recharge to the Colton and North Horn Formations within the permit area may discharge as springs in Whitmore Canyon because of the northeasterly dip of the rocks. Due to abundant claystone and mudstone in these formations and the thickness of the interburden between these formations and the mining horizon, mining will not impact groundwater in these horizons.

Adjacent to the permit area, the upper slopes of the east side of West Ridge are the recharge area for Colton Formation groundwater systems that discharge as springs in Whitmore Canyon and contribute base flow to Grassy Trail Creek. These groundwater systems occur in the shallow subsurface and will not be undermined. Mining will have no impact on the recharge and discharge of these springs.

724.700 Not applicable.

R645-301-725 Baseline Cumulative Impact Area Information

Mayo and Associates (1997; Appendix 7-1, 2001; Appendix 7-1A) have analyzed geologic and hydrologic information and prepared a document describing the surface-water and groundwater systems of the permit and adjacent areas. This report contains the information to assess the probable cumulative hydrologic impacts of coal mining and reclamation operations as required by R645-301-729.

The hydrology and geology of the area around Grassy Trail reservoir is discussed in a seismic analysis report (see Appendix 5-11) and the Phase II dam safety report (see Appendix 5-12). These reports conclude that it is unlikely that mining induced seismicity or subsidence will impact the performance of the Grassy Trail Dam and Reservoir. Based on the conclusion of this study the BLM has approved the R2P2 to allow full extraction longwall mining of Panel #7. BLM also added a special stipulation #17 to the federal lease related specifically to the Grassy Trail Reservoir, stating, "*The Lessee is and will remain liable for any and all damages or hazardous conditions resulting from the mining operations under the lease.*"

Based on BLM's approval the company then successfully mined longwall panel 7 from December, 2005 through September, 2006. Soon thereafter, RB&G Engineering prepared a summary post-mining report on the mining related affects on the reservoir (see Appendix 5-16). Still later, in 2010, RB7G Engineering prepared an additional update to the summary report (see Appendix 5-17). Based on these reports, BLM has recently approved the R2P2 to allow additional longwall mining of panel block 18-20 on the east side of the mains in the vicinity of (i.e., west and north of) Grassy Trail reservoir (see Appendix 5-3C). This new approval contains the same lease stipulation #17, as with the previous approval of panel 7.

R645-301-726

Modeling

No numerical models have been created for the permit area.

R645-301-727

Alternative Water Source Information

The determination of the probable hydrologic consequences (R645-301-728) indicates that the proposed coal mining activities will not result in the contamination, diminution, or interruption of groundwater or surface-water sources within the proposed or adjacent areas. Therefore, WEST RIDGE Resources, Inc. has not prepared information regarding alternative water sources.

R645-301-728

Probable Hydrologic Consequences (PHC) Determination

This section describes the probable hydrologic consequences (PHC) of underground coal mining in the permit area. This determination is based on the data and information presented previously in this chapter and by Mayo and Associates (1997; Appendix 7-1, 2001; Appendix 7-1A). The PHC will be updated, if needed, following the collection and analyses of information gathered during the 1998 field season.

728.310

Potential adverse impacts to the hydrologic balance

Longwall coal mining may result in land subsidence and bedrock fracturing. Subsidence and fracturing have the potential to impact the hydrologic balance if fracturing increases the vertical hydraulic conductivity of overburden rock. Possible consequences of fracturing include decreasing discharge rates of near-surface groundwater while increasing the recharge rates of deeper groundwater systems.

Mining will occur in the Lower Sunnyside Seam of the Blackhawk Formation. Over 90% of the springs in the West Ridge area discharge from near-surface groundwater systems in alluvial/colluvial materials and the Colton and North Horn Formations. The thick interburden between the mined horizon and the near-surface groundwater systems and the presence of swelling clays in the North Horn Formation will prevent fracturing and subsidence from increasing vertical hydraulic conductivities and decreasing spring discharge rates.

Groundwater that is encountered by mining operations will likely be old, meaning that recharge occurred thousands of years in the past. Well DH86-2 encountered water in the Sunnyside Sandstone below the coal seam to be mined. This water has a radiocarbon age in excess of 11,000 years.

Groundwater systems encountered in the Blackhawk Formation occur in isolated

sandstone paleochannels, fractures, and faults. These groundwater systems are not in active hydraulic communication with the surface and have limited areal and vertical extent. Mining could dewater some of these systems if they are intercepted during mining operations. Because of the limited spatial extent of these systems, discharge from these isolated groundwater systems will cease soon after interception by mine workings.

Mining could also encounter water impounded in the old Sunnyside mine workings. In order to avoid accidentally mining into flooded workings, the West Ridge mine will perform exploratory drilling ahead of development when active mine works are within 500 feet of the projected Sunnyside workings. Face drills will be used to drill at least 100 feet out in advance of the actual mine face development. The exploratory face drill will be a small diameter and if water is encountered from the old works the drill hole can easily be plugged and sealed. The West Ridge mine plan assumes that development will proceed to within 300 feet of the old works. West Ridge mine intends to stay away from the old works but will drill ahead as a precautionary measure in the event that the mine maps or surveying has a margin of error.

Based on the analysis of the probable hydrologic consequences (PHC), it has been concluded that it is highly unlikely that mining in the West Ridge area will result in the decrease of groundwater discharge rates.

Grassy Trail Creek above Grassy Trail Reservoir flows across the WEST RIDGE permit area. The stream channel in this area is underlain by approximately 2,000 feet of cover, which includes the entire thickness of relatively unfaulted and unfractured North Horn Formation, which is known to form an effective barrier to vertical groundwater migration (Mayo and Associates, 1998) and is known to contain hydrophillic clays that swell when wetted to seal any fractures that may form. Therefore, the potential for the interception and diminution of surface water flows in Grassy Trail Creek as a result of mining induced subsidence is minimal. Where differential subsidence may potentially occur beneath Grassy Trail Creek, such as along longwall panel ends or above gate roads, there is the potential for localized increases or decreases in stream gradients. These changes can result in minor changes to the stream morphology, including changes in the number of pools, runs, glides, etc. Differential subsidence of the channel substrate also has the potential to result in temporary increases or decreases in sediment yield. However, because a steep, mountain stream flowing on alluvial or soft bedrock substrate has the tendency to rapidly erode elevated areas and deposit sediment in lowered areas, these effects are commonly short-lived, as the stream system is rapidly brought back into equilibrium.

In order to assess the impacts of full extraction mining beneath perennial streams in the Utah Coal District, several comprehensive investigations of the Burnout Canyon drainage above Canyon Fuel's Skyline Mine have been conducted (Forest Sciences Laboratory, 1998; Sidel, 2000). The findings of these investigations indicated that 1) baseflow discharge rates during and after subsidence of the drainage were not statistically different at the 0.05 level, 2) there was no indication that water was lost

from Burnout Creek as a result of longwall undermining of the drainage, and 3) some minor changes in stream morphology, including changes in the pool/riffle ratio of the stream channel were noted; however, similar changes in the study's control area (James Canyon) were also noted, indicating that the observed morphological changes could have been at least in part the result of non-mining-related factors. They found that the changes in channel morphology were generally short lived. Subsequent to the publication of these investigations, the Burnout Canyon drainage has been further subsided as a result of multiple seam extraction beneath the creek. No perceptible or quantifiable impacts to the drainage have been detected as a result of this mining activity (USFS, 2001).

Burnout Creek and upper Grassy Trail Creek, both being relatively steep-gradient mountain streams, are in many senses generally comparable. However, while overburden thicknesses in the Burnout Canyon area range from about 600 to 850 feet, overburden thicknesses beneath Grassy Trail Creek are approximately 2,000 feet. Therefore, it is reasonable to assume that the hydrologic impacts to upper Grassy Trail Creek, where only single seam extraction under significantly greater cover, will be similar to (or lesser than) the minimal impacts experienced in the Burnout Canyon area.

For the reasons discussed above, it is believed that the impacts to Grassy Trail Creek above Grassy Trail Reservoir as a result of longwall mining beneath the creek will be negligible.

No mining is proposed beneath or within the angle of draw of Grassy Trail Reservoir. Therefore, the potential for loss of water from reservoir leakage is believed to be negligible.

Bear Canyon is situated in the northwest portion of the permit area within the SITLA lease area. This canyon is unique because it is within the right fork of this drainage that the cover over the longwall subsidence zone is the shallowest of anywhere in the entire permit area. In one part of the bottom of the (right fork) Bear Canyon drainage the cover over the longwall panes is approximately 325'. Due to the increased potential for the effects of subsidence to reach the surface in this area special attention has been focused on the hydrologic character of the Bear Canyon drainage.

Bear Canyon is typical of the canyons draining the southwest-facing front slopes of the Book Cliffs in this area. These canyons are generally shorter and drier than those drainages on the back-side of the Cliffs. Several baseline surveys of Bear Canyon right fork done in the late 1980's showed the drainage to be mostly dry and the canyon was identified as ephemeral along with other similar front-facing canyons in the permit area, such as "C" Canyon, "B" Canyon, and "A" Canyon. However, during site visits in June and July of 2005, substantial stream-flow was observed in the drainage. This occurrence of flow, along with the observation of riparian vegetation in the lower stretches of the canyon, has led to a re-evaluation of the classification of the drainage as intermittent. Also, because the area of the Bear

Canyon watershed is greater than one square mile the drainage is classified as intermittent under DOGM regulations.

Historical observation of Bear Canyon shows the streamflow in the bottom of the drainage to be a combination of surface flow and subsurface flow. In those areas where bedrock is at or close to the surface, flow is forced up to the surface. In other areas where the alluvium in the channel is thick and porous the flow is subsurface and the stream channel is often dry. The stretches of channel exhibiting surface flow as opposed to subsurface flow will vary from season to season, and year to year depending on prior precipitation trends in the watershed. There are times when the entire length of the channel could be expected to exhibit surface flow, and other times when surface flow is confined to certain segments. And, according to past monitoring observations, there are often times when there is no flow in the stream channel. In order to better define the hydrologic character of the canyon WEST RIDGE Resources will expand the monitoring program in Bear Canyon by adding two new monitoring sites and relocating a third site (see Map 7-7 and Table 7-1).

As mentioned previously, there is a point in the right fork of Bear Canyon where cover over the longwall panel will be about 325' which is the shallowest surface cover of any place within the current WEST RIDGE mine plan. This, along with the fact that there are state-appropriated surface water rights in this drainage (refer to Appendix 7-5), makes this an area of special interest. There is reason to expect that full-extraction longwall mining will not adversely affect the hydrologic resources of the canyon in this area. According to Syd S. Peng, ("Coal Mine Ground Control", 1978, Wiley, New York) a general rule-of-thumb is that subsidence-related fractures can be expected for a distance above the coal seam equal to 50 times the mining height, which works out to be 316' for the shallow point in Bear Canyon, which is slightly less than the cover in that area. Therefore due to the shallowness of cover in this area there could be subsidence fractures which reach the surface in the bottom of the canyon, and mitigation will be done to protect the resource.

The shallow overburden point coincides with the inflection point of the longwall subsidence profile. Based on a 22 degree angle of draw the tension zone will extend along the surface from the inflection point (shallow point) downstream approximately 130'. Areas upstream from the inflection point will be in compression as the longwall panel are extracted in progression from the southwest to the northeast according to the approved mining plan. Cracks are more likely to open up in the tension zone as compared to the compression zone where lateral forces are pushing toward each other rather than pulling apart. As mining progresses to the northeast, cover increases rapidly because of the gradient of the channel bottom and the dip of the coal seam, and surface effects of subsidence should diminish in that direction. Therefore, it is expected that any cracking which might reach the surface should most likely appear in the canyon bottom in the 130' (plus/minus) tension zone down-canyon from the inflection point. Special subsidence monitoring will be focused on this area.

WEST RIDGE will establish two new hydrologic monitoring sites in the right fork of Bear Canyon. The first site (ST-11) will be located within the tension zone described above. This site was chosen because this location should be well-suited to determine if tension cracks have affected stream flow. It is also, coincidentally, one of the areas where the bedrock nature of the channel bottom forces water to the surface, thereby making streamflow measurements more accurate. The second site (ST-12) will be located about 2400' farther up-canyon in another area where, again, the bedrock nature of the channel allows for a more accurate streamflow measurement. A third monitoring site (ST-13) will be located below the forks of Bear Canyon just outside the permit area boundary. This site will replace the existing monitoring site ST-4.

During the flow season of 2005 and 2006 (that is, May 15 through September 15) site ST-11 will be monitored monthly as long as flow is present. This monthly monitoring will help better define the nature of streamflow prior to longwall extraction in the area, which is presently scheduled for May, 2007. Thereafter, monitoring will be done on the regular quarterly basis. Site ST-12 is more inaccessible, and could be dangerous to reach in the winter. Therefore this site will be monitored twice a year, once during late spring/early summer (expected peak flow) and once in late summer/early fall, when the canyons are normally much drier. Site ST-13 will be monitored quarterly.

The longwall is presently scheduled to pass under Bear Canyon in the spring of 2007. Prior to that, WEST RIDGE will complete a survey of a series of subsidence monitoring points established up the bottom of the drainage on either side of the inflection point. After the longwall has passed under the drainage these points will be re-surveyed and an accurate account undermined WEST RIDGE will visually inspect the area to determine if any effects of subsidence are apparent. Within thirty days of the inspection WEST RIDGE will submit a written report to the Division outlining the results of this inspection .

Recent site visits have determined the existence of riparian type vegetation in the lower reaches of Bear Canyon below the forks. WEST RIDGE commits to preparing a detailed vegetation survey and mapping of the canyon bottom with emphasis on the existence of riparian specie. This survey will be conducted during the growing season of 2005 or 2006. The survey will be done in consultation with Division biologists and the completed report will be added to the Mining and Reclamation Plan as an appendix.

If it is determined that mining-related subsidence has adversely impacted the hydrologic resources of Bear Canyon, including and state-appropriated water rights, WEST RIDGE will mitigate the damage. The first option would be to seal any cracks with the application of bentonite clay. Bentonite sealing compounds are available commercially made specifically for such applications. If bentonite sealing proved ineffective, WEST RIDGE would propose the installation of piping to

transport stream water across the fracture zone to continue the flow downstream. Any work done in the stream channel would most likely require the issuance of a channel alteration permit from the Utah Division of Water Rights.

Adverse impacts to the hydrologic balance resulting from the installation and operation of the Bear Canyon gob vent holes (GVH) are not anticipated. The basis for this conclusion is summarized below.

The gob vent holes will be constructed in a manner that minimizes the potential for adverse impacts to groundwater and surface-water resources and the hydrologic balance in the area. The proposed construction designs for the GVH holes include a nominal 20 foot length of 16-inch non-perforated steel surface casing that will be cemented in place. The surface casings will isolate the wells from surface-water, soil moisture, and any shallow groundwater potentially present in the upper 20 feet and will prevent shallow water from entering the GVH wells. From approximately 20 to 200 feet below the surface, the proposed well construction plans call for the placement of 9.625-inch non-perforated steel casing that will be cemented into place. The cemented steel well casing will isolate groundwaters that may be present in bedrock groundwater systems in the upper 200 feet from the GVH wells and prevent the inflow of groundwater into the wells.

Proposed construction plans call for the lower approximately 150 feet of the GVH wells to be cased with 8.75-inch slotted steel casing that will be left open to the rock strata and will not be cemented. The purpose of the slotted steel casing is to allow the drainage of gob gasses into the well bore in the fractured rock strata overlying the Panel 8 gob. While there is the potential for drainage of some Blackhawk Formation groundwater into the GVH holes in the 150 foot interval overlying the longwall gob, the potential for appreciable or sustained groundwater drainage through these wells is minimal. This is because 1) groundwater systems in the Blackhawk Formation occur in hydraulically isolated groundwater partitions that are not in hydraulic communication with adjacent groundwater partitions, which limits the amount of groundwater that could potentially be drained, 2) the GVH holes are situated near the up-dip ends (outcrop locations) of the Castlegate Sandstone and Blackhawk Formation which limits groundwater recharge potential and the potential for the interception of regional groundwater systems, and 3) the 150-foot interval of the Blackhawk Formation overlying the gob area was likely intensely fractured as a result of the longwall mining prior to the construction of the wells which would likely have drained the groundwater partitions immediately overlying the gob area at the time of mining. For these reasons, the potential for drainage of appreciable groundwater or surface-water resources through the GVH drill holes is considered low.

The potential for detrimental impacts to the ephemeral Bear Canyon Creek drainage or any associated alluvial groundwater systems is considered remote. Appreciable baseflow alluvial groundwater systems were not identified near the GVH location during the 7 October 2008 site visit. Additionally, because the GVH well bores will

be hydraulically isolated from the upper approximately 200 feet, the potential for impacts to water quality in the drainage are unlikely. The implementation of appropriate sediment control management practices will minimize the potential for increased sediment yield from the GVH site during the construction and operational phases of the GVH system.

Prior to final reclamation, the GVH drillholes will be plugged and sealed in accordance with State and Federal regulations. The casings will be plugged at the bottom to hold the concrete. A lean concrete mixture will be poured into the casing until the concrete is within five feet of the surface. At that time the casing will be cut off at ground level and the rest of the casing will be filled with lean concrete. The concrete will be allowed to harden before final reclamation is completed. In this manner, the potential for any long-term impacts to the hydrologic balance resulting from the GVH system will be minimized.

Spring Canyon is located in the northern part of the permit area in SITLA lease 44771. There are no state-appropriated water rights on this lease. (Refer to Appendix 7-5 for additional details.) The surface is privately owned by Penta Creek with whom WEST RIDGE maintains coal mining rights. Longwall mining in this area is not scheduled until the year 2014. In this area the coal seam is 2500' deep under the bottom of the Canyon. Spring Canyon, as the name would imply, contains several springs. The drainage area of Spring Canyon is well in excess of one square mile. The canyon supports a number of beaver dams indicative of perennial flow. WEST RIDGE will add three additional monitoring points to collect baseline water monitoring data in Spring Canyon, namely ST-15 located upstream from the junction of Grassy Trail Creek, SP-101 located on a channel-bottom spring a short ways up Little Spring Canyon (a fork of Spring Canyon), and SP-102 located about 1000' upstream from the junction of Little Spring Canyon. This spring emanates from the west side of the canyon approximately 200' up from the canyon bottom. Refer to Map 7-7 and Table 7-1 for details. For the first two years (starting with the third quarter of 2005) these sites will be monitored on a quarterly basis for baseline data according to the field measurements and laboratory measurements outlined in Table 7-2 (Surface Monitoring) and Table 7-3 (Groundwater Monitoring). Thereafter, all sites will be monitored for flow and field parameters on a quarterly basis.

The Grassy Trail Dam and Reservoir is located immediately outside the eastern boundary of the permit area. This dam/reservoir is owned and operated by the cities of East Carbon and Sunnyside, has a storage capacity of 916 acre-feet, and provides most of the culinary water supply to these municipalities. The dam lies approximately 1664' vertically and 995' horizontally away from the nearest point of projected underground mining (longwall panel #7). This equates to 31 degrees, which is greater than the normal angle of draw associated with longwall subsidence. WEST RIDGE Resources has hired R,B&G Engineering to prepare a detailed evaluation report of the potential effects of longwall mining on the dam and reservoir. This evaluation report was reviewed by the Division of Dam Safety,

DOGM, Bureau of Land Management, and the cities of East Carbon and Sunnyside. The report analyzed the potential impacts from both subsidence and seismicity associated with full extraction mining, with specific emphasis on panel #7, the longwall panel projected for mining nearest to the dam. The report concluded that the risk to the dam and reservoir is minimal, and that even the maximum probable seismic event or subsidence scenario would be well within the safety factor of the dam. In addition, there are no known faults that intercept the dam that could be encountered in the mining of Panel #7. The Division of Dam Safety, the BLM, and the cities of East Carbon and Sunnyside have all accepted the conclusions of the report. This report (Grassy Trail Dam and Reservoir Seismicity Report) is included in Appendix 5-11. This report also includes as an appendix an independent report prepared by Agapito Associates (Estimated Impacts to the Grassy Trail Reservoir due to Longwall Mining) which addresses the potential effects on the dam/reservoir due to longwall induced subsidence. A companion report (Grassy Trail Dam & Reservoir Phase II Dam Safety Study) is included as Appendix 5-12. WEST RIDGE has committed to an intensive program of monitoring of the dam and reservoir during the mining of Panel #7. This monitoring plan is outlined in section 301-114.100 of this Mining & Reclamation Plan and is included in detail in Appendix 5-13.

Based on subsequent approval of the mine plan, panel #7 was extracted starting in December, 2005, and completing in September 2006. Extraction closest to the Grassy Trail Reservoir occurred in March, 2006. Monitoring, as described above, was conducted continuously during the mining of panel #7. As predicted by the RB&G report, there was no mining related damage to the dam, although some slumpage of the adjacent hillside occurred, resulting in minor movement of the west abutment of the dam. There was no loss of integrity of the earthen structure of the dam. In January, 2008, after the area above and adjacent to panel 7 had completely stabilized, RB&G Engineering prepared a post-mining Summary Report of the mining-induced seismicity. This report is included in Appendix 5-16.

After panel 7 was completed, longwall mining moved to the west side of the mains near the outcrop (more than two miles distant from the dam), and then proceeded to the northeast. Also during this time, the company went to a panel-barrier system of longwall extraction, replacing the previous side-by-side panel method. This panel-barrier system leaves a 400' wide solid barrier pillar between each longwall panel, and has significantly reduced the magnitude and frequency of mining-related seismic events. During the ensuing five years of mining, the company has continued to monitor the dam and reservoir. Results of this monitoring have been provided to all the regulatory agencies and the owners of the reservoir on a regular basis. The results of this monitoring have shown that all mining-related effects on the reservoir have stabilized. RB&G Engineering then, in September, 2010, prepared a summary report update of the subsequent mining-induced seismicity, and this report is included in Appendix 5-17.

On July, 21, 2010, BLM approved the R2P2 for federal lease UTU-78562 and

approved mining of panels 18, 19 and 20 on the east side of the mains in the vicinity of the Grassy Trail Reservoir. In the decision document, BLM states, *"We agree with the conclusion that mining longwall panels 18 through 20 as submitted should have no adverse effects on the dam structure or reservoir. The dam structure has seen no detectable affects from the mining of panel number 7. The proposed panels are further distant from the reservoir and much further from the Grassy Trails Reservoir dam. Also, the new panel-barrier design has reduced dramatically the amount and intensity of any mining induced seismicity or subsidence. Additionally, this mining plan will comply with the lease stipulation to not subside perennial streams, unless authorized, as the Left Fork Whitmore Canyon Stream will be under a barrier pillar and no full extraction mining is planned under the stream."* A copy of the approved R2P2 for panels 18-20 is included in Appendix 5-3C. As with the previous mining of panel 7, the company commits to conducting the same level of intensive monitoring of the dam during longwall mining of panel block 18-20, as previously approved by the regulatory agencies, as stated above, and included in Appendix 5-13.

As mentioned in the BLM approval letter, mining of panel block 18-20 will be further distance away from the Grassy Trail dam than with panel 7. Panel 7 mined within 995' (horizontal) from the dam, while the closest mining from Block 18-20 would be more than 3000' (horizontal) away. Also, panel 7 was about 1664' stratigraphically lower than the dam, while panel block 18-20 is located more than 2200' lower than the dam. Also, panel 7 was mined using side-by-side panels, whereas panel block 18-20 will be mined as panel-barrier, further reducing the potential for seismicity.

728.320

Presence of acid-forming or toxic-forming materials

Acid-forming materials in western coal mines generally consist of sulfide minerals, namely pyrite and marcasite, which, when exposed to air and water, are oxidized causing the production of H^+ ions (acid). Oxidation of pyrite will occur in the mine; however, acidic waters will not be observed in the mine. The acid is quickly consumed by dissolution of abundant, naturally occurring carbonate minerals. Iron is readily precipitated, as iron-hydroxide, and excess iron will be not observed in mine discharge water.

No other acid-forming materials or any toxic-forming materials have been identified or are suspected to exist in materials to be disturbed by mining.

728.331

Sediment yield from the disturbed area

Undisturbed drainage from C Canyon upstream from the mine yard facility area will, for the most part, be culverted underneath the mine site by means of a 4' diameter corrugated metal pipe in the right fork and a 3' diameter culvert in the left fork drainage. This culvert has been sized to meet or exceed the design storm for this drainage area. Runoff from the mine site disturbed area and whatever natural runoff which flows onto the disturbed area will be channeled to the mine site sediment pond. The drainage control system for the mine site is shown on Map 7-2.

The culvert and ditch system is designed to handle drainage from a 10 year, 24 hour event. Any storm event that exceeds this amount will flow through the mine yard drainage structures to the sediment pond. If a storm should exceed the design event and the magnitude of the runoff exceeds the pond capacity, the over flow will be channeled through the pond cells and out the emergency spillway to the natural drainage channel below the sediment pond. This overflow will have a lower suspended solid content than the inflow to the pond or any drainage which may be flowing down the natural drainage channel. The sediment pond will detain the inflowing water and allow suspended solids to settle out in the pond cells prior to discharge. Given the ephemeral nature of the drainages and the fact that the sediment pond is designed for the complete retention of the 10 year, 24 hour storm event, it is unlikely that discharge from the sediment pond will occur very often if ever. Since the sediment pond is designed to completely contain the 10 year, 24 hour event, only a limited amount of outflow, that in excess of the design event, would be discharged. Excess water contained in the sediment pond following runoff events would be allowed to settle and evaporate, or be decanted in a controlled manner through the primary discharge pipe to reduce the potential for erosion downstream.

Using the Universal Soil Loss Equation (USLE), an estimate of the annual sediment yield from the mine site disturbed area (in the pre-mining condition) is 0.3082 acre-feet per year. In the operational phase, this same area (the mine yard disturbed area) would then yield 0.3090 acre-feet per year. During the postmining phase, the

estimated annual sediment yield is projected to be 0.2679 acre-feet per year. Even though the sediment yield from this area will be greater during the operational phase, the sediment pond has been designed to handle the sediment yield from the disturbed area and retain it in the pond. This will effectively reduce the sediment yield from the disturbed area to an insignificant amount during the operational phase of the mine.

The sediment pond will be constructed as soon as practical at the mine site during construction. When reclamation of the mine yard is initiated following the operational phase, the sediment pond will be removed during removal of the bypass culvert and restoration of the natural channel through the site. Silt fences will be installed adjacent to the reclaimed channel to collect and contain sediment from the regraded site. The silt fences will be constructed approximately along contour with overlapping ends to prevent drainage from going around the ends. Refer to Map 5-9. Because the surface of the regraded area will be gouged with a backhoe bucket to create large depressions, the depressions of the regraded area will also act as a sediment trap. It is anticipated that sediment yield from the reclaimed area will be similar to other adjacent undisturbed areas.

During reclamation, if it is determined that topsoil resources are needed from the topsoil borrow site to achieve reclamation of the mine site, silt fencing would be placed around the outer limits of the borrow area to be disturbed. Topsoil would be stripped and stockpiled. The required amount of topsoil would then be removed from the borrow site. Care would be taken to contour the borrow pit such that runoff infiltration would be maximized to the fullest extent within the disturbed area. This would include gouging the regraded surface with pits approximately 24" wide, 36" long and 18" deep as well as sloping the regraded slopes inward to encourage precipitation infiltration on-site.

728.332 Impacts to important water quality parameters

WEST RIDGE Resources, Inc. anticipates that at some time it may be necessary to discharge water from its proposed mine into the C Canyon drainage. The distance from the proposed discharge point in the ephemeral C Canyon to the confluence with the first perennial stream, Grassy Trail Creek near Sunnyside Junction, is approximately 10 miles. Because of the general aridity of the region, and the permeable nature of the alluvial sediments over which the discharge water will flow, it is unlikely that the above-ground flow of discharge water will persist to the confluence with Grassy Trail Creek. When mine water is discharged into an ephemeral drainage from Andalex's Tower Mine (located in the Book Cliffs 15 miles north of West Ridge), water flows in the drainage for less than one mile before the flow is entirely lost to infiltration or evapotranspiration. Likewise, Iclander Creek, which flows over alluvial sediments at the base of the Book Cliffs Escarpment just south of East Carbon, flows for only about 4 miles before being totally lost to infiltration. Therefore, there will most likely be no impacts to important water quality parameters in Grassy Trail Creek from proposed mining operations because mine discharge water will likely not reach the

creek. However, if mine discharge water were to persist in the stream channel to the confluence with Grassy Trail Creek, the volume of discharge water entering the creek will be only a fraction of that which discharged from the mine.

Discharge water from the Sunnyside Mines located southeast of West Ridge had TDS concentrations of about 1,600 mg/l, with the dominant ions being sodium, sulfate, and bicarbonate (Sunnyside Coal Company, 1993). The chemical composition of this water is similar to that of waters that have been in contact with the Mancos Shale. The TDS concentration of discharge water from WEST RIDGE Resources, Inc.'s proposed new mine will likely be similar to discharge from the Sunnyside Mines.

The TDS concentration of water in Grassy Trail Creek at the mouth of Whitmore Canyon, (USGS station 0931430) near the upper contact with the Mancos Shale, averaged 988 mg/l between 1979 and 1984, with the dominant ions being sodium, sulfate, and bicarbonate (Waddell, 1981). The water quality of Grassy Trail Creek after flowing over 11 miles of Mancos Shale sediments to the confluence with the C Canyon drainage near Sunnyside Junction is significantly degraded.

Due to the low anticipated volume of mine discharge water which will flow into Grassy Trail Creek, and the similarity of the chemistry of the mine discharge water to the water in the creek, the water quality in Grassy Trail Creek will likely not be significantly impacted by mine discharge water.

Because of the poor quality of the water naturally flowing in Grassy Trail Creek near Sunnyside Junction and the relatively small quantities of mine discharge water (if any) which will flow into the creek, important water quality parameters in Grassy Trail Creek, such as sodium, sulfate, and bicarbonate will not be significantly increased.

Most of the water from any potential discharge from WEST RIDGE Resources, Inc.'s proposed new mine will infiltrate into the alluvial sediments in Clark Valley near the Book Cliffs escarpment. This will result in a rise in the local water table, or the creation of a perched water table above impermeable layers. Shale layers in the Mancos Shale will prohibit significant downward migration of these waters. The raising of the local water table may result in increased vegetation in the area. The increase in vegetation and the presence of surface water in the drainage would be a positive impact on wildlife and the local ecosystem. There are no known water rights or surface facilities adjacent to the stream drainage that could be impacted by the rising water table. Because the water quality of groundwaters in the Mancos Shale is naturally poor (with TDS significantly greater than 1,600 mg/l), the addition of mine discharge water to this system will not have any detrimental effects on water quality.

The Sunnyside mines discharged water from the mine workings for many years. This water was put to beneficial use for agricultural purposes such as growing alfalfa crops and also for irrigating the municipal golf course, from the time it was built in 1967 up to the closure of the mine in 1993. The city park also used the mine water for irrigation

since the mid-1940's. Sunnyside Coal Company had an approved UPDES permit with a TDS concentration limit of 1,650 mg/l for the mine water discharge. Excess water was discharged into Grassy Trail Creek where it was also utilized by cattle and wildlife.

The chemical quality of groundwater discharging from springs above the proposed coal mine will not be adversely affected by underground mining operations. The chemical quality of surface water flowing in upper Grassy Trail Creek will likewise not be adversely affected by underground mining operations. It has been demonstrated (Mayo and Associates, 1997; Appendix 7-1, 2001; Appendix 7-1A) that deep groundwaters adjacent to the coal seams throughout the Book Cliffs and Wasatch Plateau coal fields are hydraulically isolated from shallow overlying groundwater systems which support springs and provide baseflow to streams at the surface. There is no mechanism by which important water quality parameters in shallow groundwater systems above WEST RIDGE Resources, Inc.'s proposed coal mine may be adversely impacted by mining operations.

There are no known springs of significance in the lease and adjacent area which discharge from locations that are stratigraphically or topographically below the coal seam to be mined. The thick Mancos Shale will prevent the migration of any mine discharge water downward to formations underlying the Mancos Shale. No seeps or spring exist within or adjacent to the proposed topsoil borrow area to the west of C Canyon.

728.333

Flooding or streamflow alteration

WEST RIDGE Resources, Inc. anticipates that at some time it may be necessary to discharge water from its proposed mine into the C Canyon drainage. The discharge point will be about 1 mile above the confluence with B Canyon. Both C and B Canyons are ephemeral drainages that rarely have flow. The stream channel in this drainage is large enough to contain torrential thunderstorm events that commonly exceed several cfs in this region. The anticipated discharge rate from the mine is unknown at this time. However, historic discharges from nearby mines in the Book Cliffs coal field (Soldier Canyon and Sunnyside) average about 300 to 400 gpm. It is possible that over the life of the mine the discharge rate from WEST RIDGE Resources, Inc.'s proposed mine could be in this same range. However, it must be noted that as new mine workings are developed in "wet" areas, the discharge rate may temporarily exceed this amount. The discharge rates from these mines have been quite variable over time due to the nature of the groundwater systems encountered in the mines. Groundwater encountered in coal mines in the Book Cliffs and Wasatch Plateau coal fields is contained mostly in sandstone channels and in fractures and faults. It is not unusual for large portions of the mines to be mostly dry. For these reasons, the mine discharge rate is more a function of the amount of new mine area recently opened than the total size of the mine. At the Soldier Canyon Mine, mining proceeded for several years before any significant water sources were encountered and thus, no discharge occurred. Similar experiences are reported at Andalex's Tower Mine. Thus, although short-term increases in mine discharge rates will likely occur,

the long-term average will probably be in the range of 300 to 400 gpm if water is encountered.

A discharge of 300 to 400 gpm will not cause flooding or significant alteration of the streambed in the C Canyon drainage. The channel geometry in C Canyon is primarily the result of erosion which occurs during torrential thunderstorm events where the flow in the drainage is several times that anticipated from WEST RIDGE Resources, Inc.'s proposed mine. The mine discharge will easily be contained within the inner stream channel, which should be stable. Additionally, if a constant, relatively small discharge is achieved in C Canyon as a result of mine discharge, the net effect will be a positive one. Vegetation densities along the stream bank will increase causing increased bank stability and decreased erosion. Wildlife habitat will also be improved with the available water and the vegetation growing on the stream bank.

No streams exist in or adjacent to the proposed topsoil borrow area west of C Canyon in section 16, T. 14 S., R. 13 E.

728.334 Groundwater and surface water availability

Mining in the permit area will not significantly affect the availability of groundwater. Groundwaters in the Blackhawk Formation exist in highly compartmentalized partitions, both vertically and horizontally, and the formation does not act as a hydraulically continuous aquifer. Groundwater systems in the Blackhawk Formation are hydraulically isolated from overlying, modern groundwaters. The effects of locally dewatering the Blackhawk Formation adjacent to mine openings will not have any significant impact on groundwater availability in the region surrounding the mine.

There are no groundwater supply wells in the mine lease area or adjacent to it. The removal of water from horizons immediately above and below the mined horizon will not impact any water supplies. Rather, underground mining makes water available from the Blackhawk Formation that was previously inaccessible.

728.400 The hydrology and geology of the area around Grassy Trail reservoir is discussed in a seismic analysis report (see Appendix 5-11) and the Phase II dam safety report (see Appendix 512). These reports conclude that it is unlikely that mining induced seismicity or subsidence will impact the performance of the Grassy Trail Dam and Reservoir. Based on the conclusion of this study the BLM has approved the R2P2 to allow full extraction longwall mining of Panel #7. BLM also added a special stipulation #17 to the federal lease related specifically to the Grassy Trail Reservoir, stating, *"The Lessee is and will remain liable for any and all damages or hazardous conditions resulting from the mining operations under the lease."*

Based on BLM's approval the company then successfully mined longwall panel 7 from December, 2005 through September, 2006. Soon thereafter, RB&G Engineering prepared a summary post-mining report on the mining related affects on the reservoir (see Appendix 5-16). Still later, in 2010, RB7G Engineering prepared an additional

update to the summary report (see e). Based on these reports, BLM has recently approved the R2P2 to allow additional longwall mining of panel block 18-20 on the east side of the mains in the vicinity of (i.e., west and north of) Grassy Trail reservoir (see Appendix 5-3C). This new approval contains the same reference to lease stipulation #17, as with the previous approval of panel 7.

The Division will provide an assessment of the probable cumulative hydrologic impacts of the proposed coal mining and reclamation operation and all anticipated coal mining and reclamation operations upon surface and groundwater systems in the cumulative impact area.

A plan has been included to minimize disturbance to the hydrologic balance, to prevent material damage, and to support postmining land use.

Hydrologic Balance Protection**Groundwater Protection**

Although testing has shown that no significant impacts from acid or toxic producing materials should occur, groundwater quality will be protected by handling runoff in a manner which minimizes the infiltration into the groundwater system. Examples of techniques that may be utilized to accomplish this would include routing disturbed area drainage to the sediment pond through properly sized ditches and culverts and diverting undisturbed drainage through a bypass pipe past the disturbed area.

Within the disturbed area, drainage will be directed to ditches by sloping the yard areas. The ditches will be appropriately sized to handle flow from the 10 year/24 hour event. Culverts within the drainage system have also been sized to meet or exceed the 10 year, 24 hour design criteria.

Surface Water Protection

Coal mining and reclamation activities will be conducted according to the following plan.

The sediment pond will be installed as soon as possible during construction of the surface facility area. The pond will be appropriately sized to handle the design storm event (10 year, 24 hour) for the mine site.

Protection of surface water will incorporate measures cited under Groundwater Protection. All surface runoff from the mine site disturbed area will be diverted to the sediment pond for treatment. The sediment pond has been designed to provide total containment for the 10 year/24 hour storm plus three years of sediment accumulation. Based on sampling of the soils in the area and the fact that waste rock material will

not be stored on the surface, it is unlikely that the sediment pond will impound acid- or toxic-drainage.

It is anticipated, based on the climate of the area, that the sediment pond will remain dry most of the time. (This has been demonstrated to be true for existing coal mining operations in central Utah.) Water in the pond should evaporate rapidly following precipitation events. Infiltration into ground water zones is not expected because of the interbedded nature of the strata below the pond. Thick sequences of shale in the bedrock below the pond will greatly limit the vertical movement of water. Also, the alkaline nature of other sediment flowing to the sediment pond would serve to neutralize any low pH materials when mingled together.

To minimize disturbance to the undisturbed drainage, large diameter bypass culverts will be installed beneath the mine yard facility to allow runoff upstream above the mine site to continue downstream without coming in contact with and becoming contaminated by the mine yard area.

The bypass culvert system will be the first structure to be installed during construction of the mine site facility. Undisturbed area drainage will be bypassed under the disturbed area to minimize the amount of drainage that must be treated by the sediment pond. The bypass culverts will allow natural drainage to continue down the drainage course unaffected by the mining operation. A 36" diameter culvert will be installed in the left fork and a 48" diameter culvert will be installed in the right fork. A 48" culvert will be installed in the main canyon below the confluence of the forks. The size of the culverts will adequately pass the 100 year, 6 hour flow event even though a smaller culvert would meet the requirements of the regulations.

At the topsoil pile locations, undisturbed drainage will be diverted around the stockpiles with ditches at the edge of the pile toward the undisturbed drainage channel. The ditches will divert water away from the stockpile to minimize erosion. The ditches have been sized to convey flow from the 10 year, 24 hour event. The ditches will slope 1% toward the natural drainage. A typical ditch design is presented in Appendix 7-4 "West Ridge Mine Sedimentation and Drainage Control Plan". The stockpiled topsoil material will be loosely piled and have an irregular, pitted surface or contour furrows to help retain runoff from precipitation events and to reduce erosion until vegetation becomes reestablished. A diversion ditch will be constructed at the edge of the stockpile to divert undisturbed drainage away from the stockpile. Silt fencing will be placed around the perimeter of the stockpile to treat any runoff from the pile.

The topsoil stockpile and test plots will be designated as Alternate Sediment Control Areas (ASCAs).

Refer to Appendix 5-5 for a complete discussion on the construction of the topsoil stockpiles. Refer to Appendix 7-4 for details of the drainage control designs. Map 2-4 depicts the drainage controls of the topsoil stockpile areas.

This section describes the hydrologic monitoring plan. Locations of operational surface-water and groundwater monitoring sites are indicated on Map 7-7. Hydrologic monitoring protocols, sampling frequencies, and sampling sites are described in Tables 7-1 through 7-4. Operational field and laboratory hydrologic monitoring parameters for surface water are listed in Table 7-2, and for groundwater in Table 7-3. The hydrologic monitoring parameters have been selected in consultation with the DOGM's directive Tech-004, *Water Monitoring Programs for Coal Mines*.

Water monitoring reports will be submitted on a quarterly basis to UDOGM. Should any ground water or surface water samples indicate noncompliance with the permit conditions, the operator will promptly notify the Division and immediately provide for any accelerated or additional monitoring necessary to determine the nature and extent of noncompliance and will provide the results of the sampling to the Division.

Operational field and laboratory parameters were measured quarterly for the first ten years of mine operation, rather than for only the first two years as originally proposed in the MRP. The original MRP stated that after a two-year period of quarterly monitoring, if sampling has adequately characterized the hydrology in the area, a request would be made to reduce monitoring to field parameters and one operational analytical sample collected during low flow (August or September). It also stated, the physical parameters and chemical composition of springs and streams in and around the permit area should be adequately characterized following the collection of three years of baseline laboratory data and two years of operational laboratory data. (The first year of field data was collected in 1985-1986. The original MRP further stated that, thereafter, continued quarterly monitoring for laboratory parameters would probably not enhance the scientific understanding of hydrologic systems in the mine permit area. Beginning in 2nd Quarter of 2011, WEST RIDGE Resources, Inc. will implement this reduced schedule for ST-10 and will officially drop stream sites ST-5, ST-6A, ST-7, ST-11, ST-12 and ST-13 and spring sites SP-15, SP-16, WR-1 and WR-2.

Each of the sampling locations and their hydrologic significance are described below. However, in order to comply with UDOGM directive Tech-004, baseline samples will be collected from each spring in the monitoring program during the low flow (fall) sampling and from each stream monitoring site during low flow every five years beginning with the first mid-term review. The five year baseline samples will be repeated every five years until reclamation is complete.

Two years of baseline monitoring has been performed at all monitoring sites; subsequently, the quarterly operational monitoring schedule was utilized through 2010. Monitoring as specified herein will continue through reclamation until bond release unless otherwise modified.

Streams

Grassy Trail Creek is the only perennial stream in the permit and adjacent areas. Four sites on Grassy Trail Creek have been monitored.

Stream site ST-10 is located on the north end of our mining panels, a reduction in laboratory analyses from quarterly to annually will be implemented beginning 2nd Quarter of 2011. Stream site ST-3 is located below the confluence with Hanging Rock Canyon. Stream site ST-8 is located just above the confluence with Water Canyon, downstream of the permit area and ST-9 is located on upper Grassy Trail Creek at the inlet to Grassy Trail Reservoir. These monitoring sites on Grassy Trail Creek will be used to document any potential changes in stream flow or water quality that may be attributable to mining at WEST RIDGE, so data collection efforts at these sites will continue, while ST-10 will be on the reduced monitoring schedule. A description of Upper Grassy Trail water quality included above, which was included in the original version of the MRP based upon two years of data, indicates that magnesium, calcium, and bicarbonate are the major ionic components, and that TDS at ST-3 is 350 mg/L. After 10 more years of data collected, analysis indicates that the assessment is still correct: those three ions still represent the majority of the dissolved solids in Upper Grassy Trail Creek, and calculated average TDS at ST-3 is 358 mg/L. Further, quarterly water quality monitoring shows that there is relatively minor temporal variation in water quality at these sites, based upon an assessment of their major ions as represented by Stiff, Piper, and Schoeller Diagrams (see Appendix 7-11). Therefore, reduction in collecting analytical samples from quarterly to annually at ST-10 is supported by the record.

One tributary to Grassy Trail Creek within Whitmore Canyon is also monitored. ST-15 is located in at the mouth of Spring Canyon, and has been monitored since 2003. No flows have been reported since that time. It will continue to be monitored quarterly, and operational samples will be collected if flow is occurring during quarterly visits.

The sample point RST-1 was added 3rd Quarter of 2010. This site is located on the right fork of Whitmore Canyon above Grassy Trail Reservoir. This site will continue to be monitored quarterly and analyzed for operational field and laboratory parameters.

On the west side of West Ridge, five stations have been monitored for many years on ephemeral drainages contributing to lower Grassy Trail Creek. They are ST-4 (lower Bear Creek), ST-5 (below confluence of B and C Canyons), ST-6A and ST-6 (above and below the mine site, respectively, in C Canyon) and ST-7 (below A Canyon). ST-4 was monitored by visual observation of the channel for flowing water. ST-5 had a crest gauge and automatic sampler while ST-6A, ST-6 and ST-7 each had a crest gauge and bottle samplers. The west side of West Ridge stream monitoring stations, are described as follows:

- ST-4 No monitoring equipment was ever located at this site. The purpose of this station was to conduct baseline observations for two years to determine whether this portion of Bear Creek acted as an ephemeral or intermittent stream channel. Based on monthly monitoring during 1997 and 1998, it has been determined that intermittent flow does not occur in the lower section of Bear Creek and the channel responds only as an ephemeral drainage following substantial rainfall events. This continued to be documented at this site until 2005, when it was officially dropped from the monitoring plan in July 2005.
- ST-5 From 1997 through 2008, this location contained the ISCO automatic sampler and a crest gage. This station monitored drainage from both the B and C Canyon drainages. However, based on field observations, virtually all of the flow comes from the B Canyon drainage, primarily the lower side drainages and adjacent Mancos slopes. Both the B and C Canyon drainages respond as ephemeral drainages. In recent years, this site typically continued flows that were 100 percent comprised of mine discharge. While originally intended to cover both B and C Canyon drainages because surface facilities were contemplated in both of these canyons, its locations below the confluence is no longer important since surface facilities are contained within C Canyon, and not in B Canyon. Because the site has served its primarily purpose (to document the ephemeral nature of flows) and because it represents essentially the same data as is also collected upstream at ST-6, this site will be dropped from the monitoring plan beginning 2nd quarter of 2011.

ST-6 and ST-6A

These two stations are located below and above the proposed mine site in C Canyon, respectively. A crest gage (as described above) and bottle samplers were installed at these sites in 1997, with only partial success at registering flows or collecting samples. Once operations began at the mine, improving access and communications, these structures were less important. The long record of data at ST-6A indicated very little, if any, flow at this site even during severe precipitation events; snow melt runoff often appears to consist of underflow through the heavy organic matter in the channel bottom. Further, once mine discharge began, ST-6 generally receives continuous flow comprised of 100 percent mine discharge. Therefore, there is no correlation between flows at ST-6A and ST-6. The area below ST-6A was last mined in February 2007. Beginning 2nd quarter of 2011 ST-6A will be dropped while ST-6 will continue to be monitored. Although there have been some changes in ionic strength of this water over the years, as shown by Stiff, Piper, and Schoeller Diagrams (see Appendix 7-11), the basic ionic makeup of the water remains fairly constant. This water is also sampled for UPDES samples just a short distance upstream from ST-6 on a monthly basis, which provides analytical data for compliance purposes.

- ST-7 A crest gage and sampler bottles have been located in the A Canyon drainage since 1997, however equipment functionality in this very flashy and sediment-laden stream has been minimal. Originally established to document drainage, it has not served any purpose in the monitoring plan for many years, since the haul road was constructed elsewhere. Further, there are no surface facilities planned for this drainage and underground mining has been progressing in the opposite direction. This site will no longer be monitored after 2nd quarter of 2011.
- ST-11 This site, located in Bear Canyon, was added to the monitoring plan in 2005, for reasons described above in Section 728. It has been monitored since that time, but no flows have ever been reported. The area below ST-11 was mined out in November, 2006. This site will be dropped beginning 2nd quarter of 2011.
- ST-12 This site, also located in Bear Canyon and described above in Section 728, has similarly been monitored since 2005. The area below ST-12 was mined out in October 2007. No flows have been reported since that time. It will be dropped from the monitoring plan beginning in 2nd quarter 2011 as there is no longer any reason to document flow regime in this reach of Bear Canyon.
- ST-13 Similarly, this site is located in Bear Canyon, and was added to the monitoring plan in 2005, for reasons described above in Section 728. It has been monitored since that time, but no flows have been reported. This site will be dropped from the monitoring plan beginning in 2nd quarter 2011.

Springs

Eight springs in the permit and adjacent areas have been monitored since at least 1999; some of these have been monitored by WEST RIDGE since 1997, and some even earlier by other entities. Two other springs, SP-101 and SP-102 have been monitored since 2003. Four of these springs (SP-12, SP-13, SP-15, and SP-16) discharge from the lower slopes of West Ridge in Whitmore Canyon. Two springs, WR-1 and WR-2, discharge from the upper slope of West Ridge in Whitmore Canyon. Refer to Map 7-7. One spring (SP-8) discharges in the upper drainage of C Canyon. Hanging Rock Spring (S-80), SP-101 and SP-102 are located near the northeast corner of the permit area and discharges from the east slopes of Whitmore Canyon.

Most of the monitoring stations in this monitoring program are located on the east slope of West Ridge. This is because, with the exception of SP-8, there are no springs that are suitable for monitoring on the west side of West Ridge.

Beginning in 2nd Quarter of 2011, monitoring at SP-15, SP-16, WR-1 and WR-2 will be discontinued. These sites are away from the direction that mining is occurring or will occur in the future, a long record is in place to document that no impacts have occurred, and any past subsidence activities have long ceased. WR-1 is located outside the West Ridge Mine permit area. It was undermined by the adjacent Sunnyside Mine workings at a depth of more than 2000' below the surface as shown on Plate 7-7. This area was undermined at least fifteen years ago. WR-2 is located 2400' above the underlying coal seam and was undermined in June, 2004 as part of the West Ridge mining operation. Subsidence monitoring has been conducted by Ware Surveying as a part of the continuing monitoring program for the Grassy Trail Reservoir located not far away. Several of the subsidence points were located above longwall panel 7 and are less than 1700' feet from WR-2. These points were undermined in March, 2006. This survey shows that mining-induced subsidence in these areas has been completely stabilized for the past three years (see Appendix 7-13). Since WR-2 was undermined by longwall panel 5 nearly two years prior to the Grassy Trails subsidence points, this provides strong assurance that the area around WR-2 has now been similarly stabilized for an even longer time period.

At sites SP-12, SP-13, SP-101, SP-102, S-80 and SP-8, quarterly monitoring will continue.

Wells

Only one groundwater monitoring well (DH86-2) exists in the permit area. This well monitors the Sunnyside Sandstone Member of the Blackhawk Formation, which is below the coal seam that will be mined. In addition to field parameters and operational water quality parameters, water level will be measured in this well. Because data collected at this site since 1997 exhibits more variability than at the other monitoring sites, quarterly analytical sampling will continue.

Underground Sampling

UG-1 Starting in the fall of 2010, West Ridge Resources will begin an underground monitoring program on the pre-treatment mine-water. A monthly sample of the in-mine water will be collected prior to treatment and analyzed for operational field and laboratory parameters. Parameters will include total and dissolved iron, sulfate, alkalinity, total and dissolved solids, field conductivity, field temperature, field dissolved oxygen and field pH. The sample will be collected in 9th right between the seal and treatment area. This sample point will be called UG-1. Please refer to Appendix 5-15, Attachment 10 for a description and location of UG-1.

Grassy Trail Flumes

LF-1 & RF-1 In response to an agreement between the company and the owners of the Grassy Trail Dam/Reservoir (East Carbon City, Sunnyside City and Sunnyside Cogen Power Plant) flow measurements of the right and left forks of Whitmore Canyon immediately above the reservoir will be taken. A 3' Parshall Flume or a comparable flume will be reconstructed in the right and left forks above Grassy Trail Reservoir in the Spring/Summer of 2011. Flumes will be equipped with a continuous flow monitor and will be downloaded and reported quarterly. See Appendix 7-14 for Grassy Trail Reservoir - Right Fork Historical Flow Data.

Table 7-1 HYDROLOGIC MONITORING PROTOCOLS AND LOCATIONS

Name	Sample Parameters	Sample Frequency	Location Description
Streams			
RST-1	Flow, Field, Lab Analysis	Quarterly	Right Fork - Grassy Trail
ST-3	Flow, Field, Lab Analysis	Quarterly	Grassy Trail Creek
ST-6	Flow, Field, Lab Analysis	Quarterly	C Canyon
ST-8	Flow, Field, Lab Analysis	Quarterly	Grassy Trail Creek
ST-9	Flow, Field, Lab Analysis	Quarterly	Grassy Trail Creek
ST-10	Flow, Field, Lab Analysis	Annually	Grassy Trail Creek
ST-15	Flow, Field, Lab Analysis	Quarterly	Spring Canyon Stream
Springs			
SP-8	Flow, Field, Lab Analysis	Quarterly	North Horn Fm. In C Canyon
SP-12	Flow, Field, Lab Analysis	Quarterly	Colton Fm. Upper Whitmore Canyon
SP-13	Flow, Field, Lab Analysis	Quarterly	Colton Fm. Upper Whitmore Canyon
SP-101	Flow, Field, Lab Analysis	Quarterly	Little Spring Bottom
SP-102	Flow, Field, Lab Analysis	Quarterly	Spring Canyon Hillside
S-80	Flow, Field, Lab Analysis	Quarterly	Hanging Rock Spring
Wells			
DH86-2	Water Level, Field, Lab	Quarterly	Sunnyside Sandstone in C Canyon
Underground			
UG-1	Field, Lab Analysis	Monthly	West Ridge Mine
Flumes			
LF-1	Flow only	*Quarterly	Left Fork of Grassy Trail Reservoir
RF-1	Flow only	*Quarterly	Right Fork of Grassy Trail Reservoir

* Flows are continually monitored and will be downloaded quarterly.

Note:

ST-5, ST-6A, ST-7, ST-11, ST-12, ST-13, SP-15, SP-16, WR-1 and WR-2 were dropped in 2011.

Table 7-2 SURFACE WATER OPERATIONAL WATER QUALITY MONITORING

Field Measurements	Reported As
Flow	gpm
pH	pH units
Specific Conductivity	$\mu\text{s}/\text{cm}$ @ 25°C
Dissolved Oxygen	mg/l
Temperature	°C
Laboratory Measurements	Reported As
Total Dissolved Solids	mg/l
Total Suspended Solids	mg/l
Carbonate	mg/l
Bicarbonate	mg/l
Alkalinity, Total	mg/l
Hardness	mg/l
Calcium (Dissolved)	mg/l
Chloride	mg/l
Iron (Total)	mg/l
Iron (Dissolved)	mg/l
Magnesium (Dissolved)	mg/l
Manganese (Total)	mg/l
Manganese (Dissolved)	mg/l
Potassium (Dissolved)	mg/l
Sodium (Dissolved)	mg/l
Sulfate	mg/l
Oil and Grease	mg/l
Cations	meq/l
Anions	meq/l
Cation/Anion Balance	%

Table 7-3 GROUNDWATER OPERATIONAL WATER QUALITY MONITORING

Field Measurements	Reported As
pH	pH units
Specific Conductivity	$\mu\text{S}/\text{cm}$ @ 25°C
Temperature	°C
Laboratory Measurements	Reported As
Total Dissolved Solids	mg/l
Carbonate	mg/l
Bicarbonate	mg/l
Alkalinity, Total	mg/l
Hardness	mg/l
Calcium (Dissolved)	mg/l
Chloride	mg/l
Iron (Total)	mg/l
Iron (Dissolved)	mg/l
Magnesium (Dissolved)	mg/l
Manganese (Total)	mg/l
Manganese (Dissolved)	mg/l
Potassium (Dissolved)	mg/l
Sodium (Dissolved)	mg/l
Sulfate	mg/l
Cations	meq/l
Anions	meq/l
Cation/Anion Balance	%

Table 7-4 UPDES DISCHARGE POINT MONITORING

<u>MONITORING POINTS</u>	<u>FREQUENCY</u>
001	Monthly
002	Monthly
<u>FIELD MEASUREMENTS</u>	<u>REPORTED AS</u>
Flow	gpd
pH	pH units
Specific Conductivity	µs/cm @ 25°C
Temperature	°C
<u>LABORATORY MEASUREMENTS</u>	<u>MAXIMUM</u>
Oil and Grease (if sheen is visible)	10 mg/l
Total Suspended Solids	70 mg/l
Total Iron	1.0 mg/l
Total Dissolved Solids	One ton/day

Table 7-5 UG-1 UNDERGROUND MONITORING POINT

<u>MONITORING POINT</u>	<u>FREQUENCY</u>
UG-1	Monthly
<u>FIELD MEASUREMENTS</u>	<u>REPORTED AS</u>
pH	pH units
Specific Conductivity	µs/cm @ 25°C
Dissolved Oxygen	mg/l
Temperature	°C
<u>LABORATORY MEASUREMENTS</u>	<u>REPORTED AS</u>
Total Dissolved Solids	mg/l
Total Suspended Solids	mg/l
Iron (Total)	mg/l
Iron (Dissolved)	mg/l
Sulfate	mg/l
Alkalinity	mg/l

*Please refer to Appendix 5-15, Attachment 10 for a description and location of UG-1.

Based on testing of roof and floor materials, formation of acid- or toxic-materials does not appear to be a concern. Roof and floor materials will be permanently stored underground and will not be brought to the surface for disposal.

Samples of the roof, floor and coal from an outcrop of the Lower Sunnyside coal seam in the left fork of C Canyon were collected for analyses. The samples were sent to Inter-Mountain Laboratories, Inc. in Sheridan, Wyoming and analyzed according to Table 6 in DOGM's "Guidelines for Management of Topsoil and Overburden For Underground and Surface Coal Mining". The Table 6 parameters were run on the samples to look for toxic or acid-forming materials. Refer to Appendix 6-1 for the laboratory analyses. The Table 6 sampling regime was intended for soil materials which are going to be used as a plant growth medium during final reclamation. It is not likely that any significant amount of the roof, floor or coal material would be incorporated in the regraded fill material at the time of final reclamation because there will not be any coal processing or coal preparation at the minesite. Also, prior to reclamation of the minesite, all coal will be removed from the minesite and sold.

Chemicals and petroleum products to be used at the mine will be stored in a controlled manner. The following products may be used by mining operations: diesel fuel, gasoline, grease, motor oil, water based hydraulic fluid, antifreeze, brake fluid, gear lubricating oil, rock dust, magnesium chloride, spray paint and stopping sealant. Chemicals and petroleum products to be used at the mine will be stored in a controlled manner. Petroleum products such as diesel fuel, transmission oil and grease will be stored in the mine yard in a contained, concrete structure. Other miscellaneous products would be stored in the mine warehouse.

Emulsion fluid spills will be minimized through the following:

- Emulsion fluid will not be mixed on the surface. The emulsion concentrate is delivered to the minesite in factory sealed 500 gallon containers. These containers are specifically designed to be easily handled by standard equipment at the mine site and transferred to mobile equipment for transport underground near the longwall equipment.

- Most longwall installations now utilize a bio-degrade able emulsion fluid in accordance with the manufacturer's recommendations. The emulsion mixture is very dilute, typically 2 parts emulsion fluid to 98 parts water.

- Any accidental longwall fluid spills on the surface would be cleaned up like any other spill in accordance with the site specific Spill Prevention Control and Countermeasure Plan. The sediment pond cells would provide an effective line of defense against any offsite contamination.

-Any emulsion fluid spill underground would go to an underground sump where water is typically stored and reused underground. Any water discharged from the mine would be tested and analyzed in accordance with the approve UPDES permit.

-The C Canyon drainage is ephemeral and supports no aquatic life. The closest flowing stream is Grassy Trail Creek which is over 11 miles to the southwest.

731.400

All water wells utilized during the operating phase will be abandoned in accordance with the rules outlined in "Administrative Rules For Water Well Drillers, State of Utah, Division of Water Rights, 1987". Closure of the wells will be conducted by a licensed well driller.

Final abandonment of the proposed water monitoring well DH 86-2 (at the mine site) will be conducted prior to completion of final reclamation. The abandoned well will be filled to within two feet of the surface with Neat Cement conforming to ASTM standard C150, a cement grout consisting of equal parts of cement conforming to ASTM standard C150 and sand/aggregate with no more than 6 gallons of water per sack of cement or bentonite-based products specifically designed for permanent well abandonment.

The cement will be introduced at the bottom of the well and placed progressively upward to within two feet of the surface. The casing will be severed a minimum of two feet below the ground surface. A minimum of two feet of compacted native material will be placed above the abandoned well upon completion.

Within 30 days of the completion of well abandonment procedures, a report will be submitted to the state engineer by the responsible licensed driller giving data related to the abandonment of the well. The report shall be made on forms furnished by the state engineer and shall contain the information required, including but not limited to:

- 1) Name of licensed driller or other person(s) performing abandonment procedures,
- 2) Name of well owner at time of abandonment,
- 3) Address or location of well by section, township and range,
- 4) Abandonment materials, equipment and procedures used,
- 5) Water right or file number covering the well,

- 6) Final disposition of the well,
- 7) Date of completion.

731.500

Discharges

731.510

The West Ridge Mine will be operating in the Lower Sunnyside seam which is the same seam mined by Kaiser Sunnyside mine immediately to the southeast of the West Ridge reserves. WEST RIDGE intends to mine around old Sunnyside mine workings. There is a possibility that the old Sunnyside works may contain water, especially in the northeasterly areas which are the furthest down dip. WEST RIDGE Resources has acquired all of the most current certified mine maps of the Sunnyside old works. The Kaiser mining operation was a large operation with a sophisticated engineering, surveying and drafting department. WEST RIDGE Resources is confident that these maps were accurately surveyed and updated and accurately portray the extent of the old works. Nonetheless, extreme caution will be exercised as mine development is being driven out toward the old works. WEST RIDGE Resources will employ professional licensed, certified land surveyors to monitor the progress of the underground mine development. All surveying in the West Ridge mine will be tied to the same surveying coordinates and control as was used for the Sunnyside mine. When the West Ridge works are within 500 feet of the projected Sunnyside works exploratory drilling will begin ahead of the development. Face drills will be used to drill at least 100 feet out in advance of the actual mine face development. The exploratory face drill will be a small diameter and if water is encountered from the old works the drill hole can easily be plugged and sealed. The West Ridge mine plan assumes that development will proceed to within 300 feet of the old works. West Ridge mine intends to stay away from the old works but will drill ahead as a precautionary measure in the event that the mine maps or surveying has a margin of error.

731.520

Gravity Discharges From Underground Mining Activities

Surface entries and accesses to underground workings will be located and managed to prevent or control gravity discharge from the mine. All workings will dip away (downdip) from the portals. It is anticipated that the mine will be relatively dry but in the event that discharge becomes necessary, the discharge will comply with the performance standards of the regulations and requirements of the UPDES permit before being discharged off the permit area.

Refer to Map 6-2, Coal Seam Structure Map for the Lower Sunnyside seam structure contours.

731.520

Gravity Discharges From Underground Mining Activities

Surface entries and accesses to underground workings will be located and managed to prevent or control gravity discharge from the mine. All workings will dip away (downdip) from the portals. It is anticipated that the mine will be relatively dry but in the event that discharge becomes necessary, the discharge will comply with the performance standards of the regulations and requirements of the UPDES permit before being discharged off the permit area.

Refer to Map 6-2, Coal Seam Structure Map for the Lower Sunnyside seam structure contours.

731.600

Stream Buffer Zones

The natural drainage channels in the main C Canyon and right fork of C Canyon drainage are classified as intermittent by the regulatory definition. (The watershed area is greater than one square mile). The channel operates like a ephemeral drainage channel although no drainage flow in the channel has been recorded during the last two years of monitoring.

A buried culvert will be placed through the proposed disturbed area to convey drainage from precipitation events past the mine site. The undisturbed bypass culvert system will be sized to handle runoff from the 100 year, 6 hour precipitation event. This is well in excess of the 10 year, 6 hour design event required by the regulations for a temporary diversion. The larger culvert is being proposed as an extra measure of safety and protection for the mineyard. Stream buffer zone markers will be placed at the north and south ends of the mine site facility area above the drainage channel to prevent channel disturbance by surface operations.

Mining activities will minimize impact to the undisturbed area by use of diversion ditches and the sediment pond to control and contain sediment and

disturbed area runoff within the mineyard facility area.

It was determined by the Division of Water Rights that no stream alteration permit would be required for culverting of the C Canyon drainage. Refer to the August 19, 1998 letter included in Appendix 7-9.

The proposed undisturbed drainage channel diversion is discussed in greater detail under R645-301-742.300 and in Appendix 7-4.

Grassy Trail Creek is an intermittent stream located in the permit area in Whitmore Canyon located northeast of West Ridge. In this area the coal seam to be mined is 2000' below the streambed. Technically speaking, mining will be conducted within the 100' stream buffer zone, but only as measured horizontally. Therefore, no stream buffer zone protection measures on the surface are anticipated. In the "Investigation of Surface Water and Ground Water Systems in the Whitmore LBA Area, Carbon County, Utah" (Appendix 7-1A), Mayo and Associates concludes that "the stream channel in this area is underlain by approximately 2,000 feet of cover, which includes the entire thickness of relatively unfaulted and unfractured North Horn Formation, which is known to form an effective barrier to vertical groundwater migration (Mayo and Associates, 1998) and is known to contain hydrophyllic clays that swell when wetted to seal any fractures that may form. Therefore, the potential for the interception and diminution of surface water flows in Grassy Trail Creek as a result of mining induced subsidence is minimal." Mining related impacts to fish, wildlife and other hydrologic resources is expected to be correspondingly minimal.

731.700

Cross Sections and Maps

There is no flowing surface water within the permit area and no water supply intakes. Surface receiving waters are at least ten miles to the southwest where the ephemeral drainage system reaches Grassy Trail Creek near the Sunnyside Junction (junction of Highway 123 and State Road 6). Refer to Map 1-1 for the location of Grassy Trail Creek. All disturbed area runoff will flow into the sediment pond where it will be contained.

The location of the water monitoring well, the water supply pipeline from East Carbon and the water storage tanks to be used are shown on Map 5-5.

Water monitoring stations and water monitoring well DH 86-2 are shown on Map 7-6. Operational monitoring stations are depicted on Map 7-7 "Operational Monitoring Map". Refer to Table 7-1 for a listing of the operational monitoring locations.

Map 5-5 shows the location of the proposed sediment pond.

Cross sections for the proposed sedimentation pond are presented on Map 7-4A "Sediment Pond Cross-Sections".

731.800

Water Rights and Replacement

No surface coal mining and reclamation activities (strip mining) will occur in the affected permit area.

Mining should not have any impact on the existing water rights in and around the proposed mining area.

SEDIMENT CONTROL MEASURES

732.100

Siltation structures will be constructed and maintained in accordance with the applicable regulations. Siltation structures will not be removed until authorized by the Division of Oil, Gas and Mining.

Alternative sediment control measures will be used in areas where the surface disturbance is minor and sediment control is expected to be restored fairly rapidly with revegetation. Alternate sediment controls will be used on the topsoil stockpile and test plot areas. At these locations diversion ditches will divert undisturbed area runoff away from the site. Silt fencing will be utilized to minimize siltation from the sites. The surface of the stockpile will be pocked and roughened to retain moisture and minimize runoff from the disturbed surface. The surface area will be revegetated to minimize surface erosion. The alternate sediment control area located in the right fork is 0.46 acres while the stockpile area for the left fork is 1.13 acres.

The other ASCA (alternate sediment control area) will be at the office and parking lot area below the mine yard facility area. This 1.37 acre area will be sloped to one end of the pad area where a sediment retention basin will be used for sediment control. In addition, the slopes and embankment of the office pad will be revegetated to control sedimentation and erosion.

732.200

The sedimentation pond has been designed in compliance with the appropriate regulations. Refer to Maps 7-4 and 7-4A for the sediment pond plan and cross-section details. The sediment pond will be reclaimed during reclamation of the mineyard facilities. Refer to Appendix 5-5 for the complete details of the reclamation plan.

732.300

Diversions will be constructed and maintained with respect to R645-301-742.100 and 742.300.

732.400

Road Drainage

Roads within the disturbed area will be designed and constructed to utilize standard designs for surface drainage control, culvert size and spacing and grade. Refer to Map 5-5, Surface Facility Map.

Drainage ditches and culverts have been designed to handle a 10 year, 24 hour storm event. The larger design capacity will also provide additional capacity above what is required by the regulations, for a greater margin of safety in the mineyard during operations.

Riprap will be placed around the inlet end of the culverts to a height of at least 6" above the required headwall for each culvert. The outlet of the main canyon bypass culvert will be equipped with adequately sized riprap to slow

the outlet velocity and prevent erosion to the natural downstream channel.

Trash racks will be placed on all undisturbed bypass culvert inlets to prevent floating debris and rocks from plugging the culvert. The trash racks will be slanted 3/4 inch steel bars welded on six inch centers across the flared inlet structures of each culvert. The bars will be sloped from the front of the inlet up to the top of the culvert. Use of trash racks on the smaller culverts within the mine yard drainage system will be at the discretion of the operator and based on site specific conditions.

R645-301-733

IMPOUNDMENTS

733.100

General Plans

A sediment impoundment structure (sediment pond) is proposed for treatment of disturbed area runoff from the mineyard facility area. The pond will be located near the southern end of the mine yard (refer to Map 5-5) and has been designed to contain and treat drainage from the 10 year, 24 hour event. The associated conveyance structures, such as culverts and ditches, have been sized to convey drainage from the 10 year, 24 hour event into the sediment pond. Appendix 7-4 provides the detailed designs and calculations used to derive the pond capacity, ditch and culvert sizes.

733.110

The designs and calculations have been certified by a registered, professional engineer experience in the design and construction of sediment ponds.

733.120

Maps 7-4 and 7-4A depict the pond design in plan view and in cross-section. Calculations made in Appendix 7-4 are based on the design dimensions presented in the above-mention maps.

733.130

The sediment pond has been designed to contain runoff from the mineyard disturbed area as well as several contributing undisturbed drainage areas. The runoff and sediment yield have been calculated using a 10 year, 24 hour precipitation event. Because of the narrowness and steep gradient of the canyon at the downstream end of the mine yard facility area, the sediment pond has been designed to have two cells that will contain the total volume of the 10 year, 24 hour design event plus three years of sediment storage (using 0.1 acre-feet of sediment per disturbed acre). Sediment will be captured by both cells (A and B). The total sediment storage capacity of the sediment pond for a three year interval is 1.845 acre feet, however, the sediment will be cleaned out when the storage capacity reaches 60%. Sediment indicator stakes will be placed at various locations in both the upper and lower cells (A and B) so that a visual determination of the 60% level can be made.

The required volume for the sediment pond is calculated at 7.052 acre feet,

including 3 years of sediment storage. The actual pond volume at the principal spillway is 7.669 acre-feet. Refer to Appendix 7-4 for the pond design calculations. Refer to Map 7-4 for the individual cell dimensions and features. The upper cell will be approximately 18.5' feet deep from the cell bottom to the crest of the embankment while cell B will be approximately 14' feet deep. Neither of the cells meet the size specifications that require them to be regulated by MSHA under 30 CFR 77.216(a).

The pond will provide a theoretical detention time of 24 hours. The upper cell (cell A) of the sediment pond will be constructed with an open channel spillway at a minimum depth of 1.5' below the top of the dam. The open-channel spillway will be constructed of grouted rip-rap or concrete, and will have a minimum 5' bottom width with 2h : 1v side slopes. The lower cell (cell B) will be constructed with a combination of 2 spillways. The principal spillway will be a 36" C.M.P. culvert riser and oil skimmer. This spillway will overflow at an elevation at least 3' below the top of the dam. This spillway will discharge directly into the bypass culvert (UC-OO) which is located beneath the pond. In the unlikely event of failure of the principal spillway, the lower pond cell will also be equipped with a second (emergency) culvert spillway, consisting of a 36" C.M.P. culvert riser and oil skimmer, with a minimum depth of 2.0' below the top of the dam. This spillway will also flow directly into the undisturbed bypass culvert (UC-OO).

Discharge from the pond will be in accordance with the UPDES permit issued for the facility. Decanting the pond will be accomplished by using a portable submersible pump with an inverted inlet to decant the pond if necessary. A sample will be collected prior to decanting to determine if the water quality will meet the requirements of the UPDES permit.

UPDES sample point # 1 is located at the principal spillway of the sediment pond. (see Map 7-4). This sample point will be used if and when the pond fills to capacity and must be decanted. Access to this sampling point will be provided by a walkway which will be constructed from the crest of the pond embankment out to the primary spillway. This walkway will be substantially constructed of steel, with an expanded metal walk surface and adequate handrails. It will be attached to the steel structure of the primary spillway /oil skimmer structure. During discharge activities personnel in charge of the sampling will walk to the end of the walkway to collect samples

Decanting of this pond will be done manually using a small mobile gasoline powered pump. When used, the pump will be positioned on the spillway walkway, (see Map 7-4). The end of the suction hose will be equipped with a float so that the decanted water is sucked from the top layer of pond water which should contain less sediment. The discharge line of the pump will feed directly into the primary spillway. Mine personal will take samples at the discharge end of the pump line as it enters the principal spillway. Samples

will be secured and analyzed in accordance with the approved UPDES permit.

UPDES sample point #2 is located at the culvert riser near the mine portals. This riser leads directly into the main bypass culvert. The riser will be 42" in diameter, large enough to allow access by mine personnel. The purpose of UPDES sample point #2 is to sample any water that may be discharged from the mine in the future. It is not known at this time if or when such discharge may be necessary. However, if mine discharge becomes necessary, a discharge line (most likely 6" to 8" diameter) would be installed in the return entries (to keep from freezing) and would exit the mine through the fan portal. From the fan it is a short distance over to the culvert where the line would discharge directly into the main bypass culvert riser the discharge line will be equipped with a small petcock valve that will conveniently allow the operator to take a UPDES sample whenever water is being discharged from the mine. Samples will be secured and analyzed in accordance with the approved UPDES permit. Refer to Appendix 7-10 for the UPDES general permit.

Inlet ditches to the pond will be protected from erosion by using concrete, culverts or rip rap to convey drainage down to the water level.

The principal spillway in cell B will be a 36" cmp culvert fitted with an oil skimmer. This spillway will carry the peak flow from the 25 year, 6 hour event at a depth of 0.89' over the pipe.

The emergency spillway, located on cell B, will also be a 36" cmp culvert fitted with an oil skimmer. This spillway will be utilized, if necessary, to convey any flow in excess of the 25 year, 6 hour precipitation event out of the pond.

The sediment pond is a temporary feature. It will be removed during final reclamation of the mine site.

733.140

No previous mining has occurred under the sediment pond location, nor is mining proposed under that site. Therefore, there should be no effect on the sediment pond due to past or future mining activities.

The pond will be constructed according to design criteria listed in Appendix 7-4 under "Design and Construction Specifications For Sedimentation Pond". The sediment pond will be removed upon cessation of mining.

733.150

A structural stability analysis was performed on the pond embankment slopes by Agapito Associates, Inc. The results of their analysis are presented in Appendix 5-4.

The pond embankment (the east slope of the pond) will be keyed into bedrock or natural ground. The bedrock appears to be competent at this location with

no visible faults or fractures that would impair the operation and stability of the pond.

733.160

A certified sediment and drainage control plan containing design details (Appendix 7-4) is presented in this permit application package.

733.200

Permanent and Temporary Impoundments

Maps and cross-sections for the sediment pond have been prepared and certified. Refer to Maps 7-4 and 7-4A. Details of the pond design are presented in Appendix 7-4.

The sediment pond will collect runoff from the disturbed area during mining operations. Because the pond is a temporary structure, it has been sized according to requirements for the 10 year, 24 hour storm event. The calculated required volume for this storm event is 7.052 acre-feet, which includes a volume for three years of sediment storage. The actual design volume for the pond is 7.669 acre-feet. The pond will have a principal and emergency spillway in cell B. The maximum pond volume will be 7.669 acre-feet at the principal spillway and the maximum height water could be impounded in either of the cells is 16.5 feet (to the principal spillway in cell A). The pond therefore does not meet the criteria for MSHA regulation.

In addition to the principal spillway, the pond's emergency spillway has also been designed to safely pass the peak flow from the 25 year, 6 hour precipitation event. Any discharge from this pond will meet the requirements of the UPDES permit for the facility.

No mining will occur underneath the sediment pond nor has any mining been done beneath this location in the past. The potential effect on the structure from subsidence of subsurface strata would be nonexistent.

This temporary impoundment will be constructed and maintained to comply with the appropriate requirements. No permanent impoundments are being proposed. Reclamation of the structure will be as presented in the reclamation portion of Chapters 5 and 7 and in Appendix 5-5, Construction and Reclamation Plan.

R645-301-734

DISCHARGE STRUCTURES

Discharge structures will be constructed and maintained to comply with R645-301-744. Refer to the discussion under R645-301-744.

R645-301-735

DISPOSAL OF EXCESS SPOIL

No areas are presently designated for disposal of excess spoil. No excess spoil is anticipated during the life of the mine.

R645-301-736

COAL MINE WASTE

No coal mine waste disposal areas are being planned in the mine yard. Any waste generated will be disposed of in an approved, permitted disposal site.

R645-301-737

NONCOAL MINE WASTE

Noncoal mine waste will be stored in dumpsters, or in a contained manner, in a designated portion of the disturbed area near the shop/warehouse. Final disposal of noncoal mine waste will be in an approved, waste disposal site and will comply with R645-301-747.

R645-301-738

TEMPORARY CASING AND SEALING OF WELLS

Sealing of the groundwater monitoring well and any future wells will comply with R645-301-748. Refer to R645-301-765 for the well abandonment plan. The groundwater monitoring well will be used for monitoring only and is locked in a closed position between sampling events.

R645-301-740

DESIGN CRITERIA AND PLANS

Site specific plans that incorporate design criteria for control of drainage from disturbed and undisturbed areas are presented below.

SEDIMENT CONTROL MEASURES

Sediment control measures have been designed to prevent, to the extent possible, additional contributions of sediment to stream flow or runoff outside the permit area, to meet effluent limitations and to minimize erosion.

The most significant sediment control measure will be to collect all disturbed area runoff and divert it into a sediment pond designed for total containment of the 10 year, 24 hour precipitation event. Runoff from undisturbed areas above the mining site will be diverted, as much as possible, to reduce the amount of runoff to be treated by the sediment pond. Refer to Appendix 7-4 for the "West Ridge Mine Sedimentation and Drainage Control Plan" and Map 7-1 "Drainage Area Map" and Map 7-2 "Mine Site Drainage Map" for the mine site drainage calculations and diversion culvert specifications.

Additional measures to be taken may include: interim reclamation of disturbance, where practical, to reduce runoff and erosion; rip rapping or lining diversion ditches, where necessary, to reduce erosion; and using straw bales and check dams to control flow, sediment and erosion. A discussion of alternate sediment controls measures is presented in Appendix 7-4 for the ASCA areas (topsoil stockpile, test plots and office pad). Designs for the sediment controls will be according to information presented in Appendix 7-4 and Maps 5-5, 5-8, 7-1, and 7-4.

Snow removal activities at the mine site will attempt to stockpile any large amounts of snow in those snow storage site locations indicated on Map 7-2.

The snow stockpile locations are primarily designed for storing snow clear from some of the larger pad areas. Snow will still be plowed to the side of roadways and small pad areas.

742.220

Minimizing contributions of suspended solids and sediment to streamflow or runoff outside the permit area will be accomplished by constructing a multiple cell sediment pond for sediment treatment and storage of runoff from the disturbed area. The sediment pond has been designed to provide adequate sediment storage and detention time for the 10 year, 24 hour precipitation event. The pond has a principal and emergency spillway in cell B which is designed to pass the peak flow from the design event as required by the regulations. The design of both the principal and emergency spillways will accommodate the peak flow of 23.71 cfs from a 25 year, 6 hour event.

Water will be decanted in accordance with the UPDES permit for the facility. A submersible pump will be used to decant the pond if needed.

The sediment in the pond cells will be removed when it reaches 60% of the maximum design sediment level in cells A and B of the pond. Two sediment markers will be installed at various locations in the bottom of the cells for

evaluation of the sediment level. Refer to Map 7-4 for information regarding the sediment pond configuration. Refer to Appendix 7-4 for the "West Ridge Mine Sedimentation and Drainage Control Plan" for design calculations.

The sediment pond cell will be cleaned out upon reaching the 60% of the maximum sediment capacity. Clean out will be done during late fall or early winter, October-December, when the chance of thunderstorms is the lowest and the pond is dry. Decanting of the pond prior to cleanout will probably be unnecessary due to the arid nature of the climate. However, if decanting is necessary, the water will be allowed to settle for a minimum of 24 hours. The water will be drawn down as much as possible by pumping it into the adjacent cell.

Prior to sediment removal, samples will be taken from the sediment on the bottom to determine the depth of sediment as well as the nature of the material to be removed. Samples will be composited and analyzed according to Table 6 of DOGM's "Guidelines For Management Of Topsoil And Overburden For Underground And Surface Coal Mining".

The sediment pond does not meet the size criteria of MSHA 30 CFR 77.216(a).

The sediment pond has been designed with a primary and emergency spillway each capable of safely discharging the peak flow from the 25 year, 6 hour precipitation event. This should provide an additional measure of safety to prevent damage to the pond's integrity.

The construction site for the sediment pond will be cleared of all vegetation and debris prior to the removal of topsoil. Topsoil, if present, will be removed from the pond site and stockpiled in the topsoil storage area. In areas where fill is to be placed for the pond impoundment, natural ground will be removed for at least 12" below the base of the structure. Native material will be used when possible. The fill will be placed in lifts not to exceed 15" and compacted. Compaction of the fill material will be 95% or greater. Silt fencing and straw bales will be used to treat drainage from the site until the sediment pond embankment is constructed.

742.300

Diversions

General Requirements

Flow from undisturbed areas will be diverted away, where possible, from disturbed areas by means of temporary diversions (i.e. undisturbed drainage culverts). The diversions have been designed to minimize impacts to the hydrologic balance of the permit and adjacent areas.

All of the undisturbed drainage diversions (bypass culverts) have been sized, as a minimum, to meet the 100 year, 6 hour event for maximum protection of the mine yard area, sediment pond and undisturbed drainage below. The design incorporates structural stability and protection against flooding and damage to life and property. Designs for all diversions are presented in Appendix 7-4 and the structure locations depicted on Map 7-1. The map and plan have been certified by a registered, professional engineer.

The sediment pond has been designed and located such that if any of the temporary drainage structures (disturbed area culverts and ditches) within the disturbed area were to exceed their capacity, all drainage would still flow to and be treated by the sediment pond. Four culverts will convey drainage into the sediment pond. These inlets, have been designed to pass the flow from a 10 year, 24 hour precipitation event in order to provide more capacity and an extra measure of protection.

Following completion of mining activities, the undisturbed drainage diversion culverts, which will bypass the undisturbed drainage past the disturbed area, will be removed and the natural channel restored. Restoration of the channel will seek to reestablish a natural appearance to the drainage channel while providing a suitable channel configuration. Refer to Appendix 5-5 for a detailed discussion of the reclamation plan for the C Canyon drainage channel.

Based on measurements taken during field investigations and baseline mapping in the mine yard area, it will be possible to restore the channel to a configuration similar to what exists at the present time (pre-disturbance). Refer to Map 5-1 which is the existing topography of the site. Refer to Map 5-9, Mine Site Reclamation, for the proposed channel alignment and configuration.

Vegetation surveys conducted during June and August of 1997 confirm that there is no riparian zone in the existing drainage channels. Refer to Appendix 3-1 in Chapter 3 for information regarding vegetation of the mine site area.

742.400

Road Drainage

Roads within the disturbed area will be designed and constructed to provide environmental protection and safety and will adequately provide for surface drainage control, sufficient culvert design and spacing.

The placement of the road will seek to minimize downstream sedimentation and disturbance to the road due to runoff. The road will be located on the most stable available surface.

Primary Roads

Drainage structures on the road within the mineyard will be designed and constructed to pass the peak runoff from a minimum of a 10 year, 24 hour precipitation event.

Culverts will be designed so as to avoid plugging, collapse or erosion at the inlets and outlets. Trash racks will be installed where deemed appropriate by the operator.

The culvert calculations for the C Canyon county road culvert located within the disturbed area are provided in Appendix 7-8 C Canyon Road Station 406+70 - Culvert Sizing. The culvert was sized for a 25 year storm using the UDOT Small Area Method, the same method used to size the other culverts on the C Canyon road as well.

Following mining activities, the channel will be completely restored by removing the mine yard pad fill and regrading slopes to approximate original contour. In topsoiled areas, the channel will be reestablished by removing the geotextile fabric once the pad fill has been removed. Below the geotextile will be the original channel materials in their original arrangement. The restored channel will merge with the undisturbed downstream drainage southwest of the mine office area. The gradient of the channel and the side slopes will be similar to the premining channel.

No riparian area exists along the present drainage channel. The proposed seed mix to be used for final reclamation will incorporate species that presently exist in and adjacent to the channel area. The seed will be applied to the regraded channel side slopes by hydroseeding or hand broadcasting and raking. Containerized plants would also be planted along specified portions of the reclaimed channel.

R645-301-743

IMPOUNDMENTS

The proposed sediment pond is less than the size criteria listed in MSHA, 30 CFR 77.216(a). It has been designed and certified according to R645-301-512. Since the impoundment (sediment pond) is a temporary structure, regulations require the principal and emergency spillway to be designed to safely pass the 25 year, 6 hour precipitation event.

The impoundment will be inspected as described under R645-301-514.300.

R645-301-744

DISCHARGE STRUCTURES

Discharge from the sediment pond and bypass culvert will be controlled by riprap energy dissipators below the outlet ends downstream from the culvert outlet. The calculations and design specifications for the spillway are presented in Appendix 7-4.

R645-301-745

DISPOSAL OF EXCESS SPOIL

No areas are presently designated for disposal of excess spoil. No excess spoil is anticipated during the life of the mine. Refer to the discussion in Chapter 5, section R645-301-553 under Spoil and Waste (553.200).

No valley fills or head-of-hollow fills are being proposed.

No durable rock fills are included in the operation plan.

R645-301-746

COAL MINE WASTE

No coal mine waste piles are being proposed.

R645-301-747

DISPOSAL OF NONCOAL MINE WASTE

Noncoal mine waste, including but not limited to grease, lubricants, paints, flammable liquids, garbage, machinery, lumber and other combustible materials generated during coal mining and reclamation operations will be placed and stored in a controlled manner at the designated location near the shop/warehouse, (see Map 5-5) within the disturbed area or in a state-approved solid waste disposal area. No noncoal waste will be permanently disposed of within the permit area. Dumpsters will be used for collection and disposal of trash.

Lubricants, solvents, and grease will be stored in a covered area with limited access to prevent accidental contact from machinery. The storage area will be in the vicinity of the shop/warehouse. Any leakage at the fuel storage site will be contained within concrete lined or steel containment structures. Surface runoff will be diverted away from the storage site. Should any uncontrolled discharge of oil or petroleum products occur within the general mine yard area, the sediment pond would act as a last line of defense for the containment of any such spills and prevent flow into the natural drainage system. A Spill Prevention Control and Countermeasure (SPCC) Plan will be posted at the shop/warehouse.

A dumpster will be placed in a convenient location for disposal of nonhazardous trash. Used/broken equipment will be stored within the storage area of the mine yard. As the entire storage area reports to the sediment pond, the exact location of storage will be left to the discretion of the operator as long as the storage of materials does not block ditches or roadways.

R645-301-748

CASING AND SEALING OF WELLS

The water monitoring well (DH86-2) will be cased, sealed or plugged to prevent acid or toxic drainage from entering ground or surface water, to minimize disturbance to the hydrologic balance and to ensure safety when no longer utilized.

Upon completion of monitoring activities, the groundwater monitoring well will be permanently sealed by filling the hole with cement to within two feet of the top of the hole. Two feet of compacted native material will be placed above the sealed hole and the area reseeded.

Any future water or monitoring wells will be abandoned in a similar manner.

R645-301-750

PERFORMANCE STANDARDS

All mining and reclamation operations will be conducted to minimize disturbances to the hydrologic balance within the permit and adjacent areas, to prevent material damage to the hydrologic balance outside the permit area and support approved postmining land uses.

R645-301-751

**WATER QUALITY STANDARDS AND EFFLUENT
LIMITATIONS**

WEST RIDGE Resources, Inc. has obtained a UPDES discharge permit to cover any possible discharge from the sediment pond. Refer to Appendix 7-10.

R645-301-752

SEDIMENT CONTROL MEASURES

Sediment control measures will be located, maintained, constructed and reclaimed according to plans and designs given under R645-301-732, R645-301-742 and R645-301-760.

752.100

Siltation Structures and Diversions

Siltation structures and diversions will be located, maintained, constructed and reclaimed according to plans and designs given under R645-301-732, R645-301-742 and R645-301-763.

752.200

Road Drainage

Any roads within the disturbed area will be located, designed, reconstructed and maintained to control erosion, minimize contributions to stream flow, minimize diminution of the surface and ground water systems and refrain from significantly altering the normal flow of water in the drainage channel in accordance with R645-301-732.400, R645-301-742.400 and R645-301-762.

Drainage for the roads within the mine yard disturbed area has been addressed in Appendix 7-4 under culvert and ditch designs. The road configuration is presented on Map 5-5.

R645-301-753

IMPOUNDMENTS AND DISCHARGE STRUCTURES

Impoundments and discharge structures will be located, maintained, constructed and reclaimed to comply with R645-301-733, R645-301-734, R645-301-743, R645-301-745 and R645-301-760.

R645-301-754

**DISPOSAL OF EXCESS SPOIL, COAL MINE WASTE AND
NONCOAL MINE WASTE**

Disposal for coal mine waste and noncoal mine waste will be located, maintained, constructed and reclaimed as described in R645-301-735, R645-301-736, R645-301-745, R645-301-746, R645-301-747 and R645-301-760.

R645-301-755

CASING AND SEALING OF WELLS

All wells will be managed to comply with R645-301-748 and R645-301-765. Water monitoring wells will be managed on a temporary basis according to R645-301-738

R645-301-760

RECLAMATION

R645-301-761

GENERAL REQUIREMENTS

All temporary structures will be removed and reclaimed before bond release is sought. The restored channel will follow the grade, alignment and sinuosity of the original natural channel. Suitable riprap already existing in the stream channel will provide adequate protection against erosion, as demonstrated by the stability of the existing natural channel.

R645-301-762

ROADS

The access road is a Carbon County public road and will be left in place and maintained by Carbon County. A turnaround will be left at the end of the road.

R645-301-763

SILTATION STRUCTURES

Siltation structures will be maintained until removal is authorized by the Division and the disturbed area has been stabilized and revegetated.

When the sediment controls are removed, the land on which the siltation structures are located will be regraded and revegetated. Refer to Chapter 5 for the regrading plans of siltation structures and Chapter 3 regarding the revegetation plan for reclamation.

R645-301-764

STRUCTURE REMOVAL

Appendix 5-1 presents a detailed timetable and outline for the removal of all structures on the minesite area. Removal of the siltation structures will be contingent upon DOGM approval. The sediment pond will be removed in conjunction with the reclamation of the mine yard.

PERMANENT CASING AND SEALING OF WELLS

Permanent closure of the monitoring well 86-2 will be in accordance with the requirements of "Administrative Rules for Water Well Drillers", July 15, 1987, State of Utah, Division of Water Rights.

The abandoned well will be filled to within two feet of the surface with Neat Cement conforming to ASTM standard C150, a cement grout consisting of equal parts of cement conforming to ASTM standard C150 and sand/aggregate with no more than 6 gallons of water per sack of cement or bentonite-based products specifically designed for permanent well abandonment.

The cement will be introduced at the bottom of the well and placed progressively upward to within two feet of the surface. The casing will be severed a minimum of 2 feet below the ground surface. A minimum of 2 feet of compacted native material will be placed above the abandoned well upon completion.

Within 30 days of the completion of well abandonment procedures, a report will be submitted to the state engineer by the responsible licensed driller giving data related to the abandonment of the well. The report shall be made on forms furnished by the state engineer and shall contain the information required, including but not limited to:

- 1) Name of licensed driller or other person(s) performing abandonment procedures,
- 2) Name of well owner at time of abandonment,
- 3) Address or location of well by section, township and range,
- 4) Abandonment materials, equipment and procedures used,
- 5) Water right or file number covering the well,
- 6) Final disposition of the well,
- 7) Date of completion.

REFERENCES

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- Guttman, N.B., 1991, A sensitivity analysis of the Palmer Hydrologic Drought Index: Water Resources Bulletin, v. 27, n. 5, p. 797-807.
- Kaiser Coal Corporation, 1986, Sunnyside Number 5 Mine, Mining and Reclamation Plan.
- Karl, T.R., 1986, The sensitivity of the Palmer Drought Severity Index and Palmer's Z-Index to their calibration coefficients including potential evapotranspiration: Journal of Climate and Applied Meteorology, v. 25, p. 77-86.
- Mayo and Associates, 1997, Investigation of surface-water and groundwater systems in the West Ridge Area, Carbon County, Utah: unpublished consulting report, 80 p.
- NDCC (National Climatic Data Center, 1997, Online monthly climatic parameters: www.ncdc.noaa.gov/coop-precip.html.
- Sidel, R.C., Kamil, I., Sharma, A., and Yarnashita, S., 2000, Stream response to subsidence from underground coal mining in central Utah; Environmental Geology, v. 39, p. 279-291.
- Sunnyside Coal Company, 1993, Sunnyside Mines, Mining and Reclamation Plan.
- United States Forest Service, 2001, Draft environmental impact statement, Flat Canyon Tract.
- Utah Department of Environmental Quality, 1991. State of Utah Public Drinking Water Rules: Part I - Administrative Rules. Eighth Edition.
- Waddell, K.M., Contratto, C.T., Sumsion, C.T., and Butler, J.R., 1981, Hydrologic Reconnaissance of the Wasatch Plateau-Book Cliffs Coal-Fields area, Utah: USGS Water Supply Paper 2068.

APPENDIX 5-3C
BLM R2P2 APPROVAL OF PANEL BLOCK 18-20

APPENDIX 5-3C

BLM R2P2
APPROVAL OF LONGWALL PANELS
PANEL BLOCK 18-20



United States Department of the Interior

BUREAU OF LAND MANAGEMENT

Utah State Office

P.O. Box 45155

Salt Lake City, UT 84145-0155

<http://www.blm.gov>

COPY



In Reply Please Refer To:

3482

SL-068754

UTU-78562

(UT-070)

JUL 21 2010

Certified Mail--Return Receipt Requested
Certificate No. 7009 1410 0001 9070 8120

Mr. David W. Hibbs
President
West Ridge Resources, Inc.
P. O. Box 910
East Carbon, Utah 84520

Re: Minor Modification, Resource Recovery and Protection Plan (R2P2), Longwall Panel Block 18 through 20, West Ridge Mine

Dear Mr. Hibbs:

The Bureau of Land Management (BLM) has received from West Ridge Resources, Inc. (West Ridge), proposed revisions to the subject R2P2. The modification seeks approval of three longwall panels where the final authorization to mine would rely on the results of monitoring the mining of a previous longwall panel and its affects to the Grassy Trails Reservoir. The area of the mine affected by this proposal is on Federal coal lease UTU-78562 and this mine plan is contingent on mining on adjacent private coal lands.

Proposed Plan: West Ridge proposes to mine three longwall panels, numbers 18, 19 and 20, located between the Main Entries and the Grassy Trails Reservoir. These panels would be mined after the current block of panels on the northwest of the Main Entries is completed. Development for these proposed panels is planned to begin the last part of this year. The R2P2 for this area originally planned for longwall panels at this location. Due to the lease stipulation in UTU-78562, which requires protection of the Grassy Trails Reservoir from effects by underground mining, the currently approved R2P2 did not authorize mining these three panels pending the results and analysis of the data gathered from mining panel number 7, south of the reservoir.

The BLM has received all the monitoring data and the detailed report from the consultants. We have reviewed the information and have received in this modification, West Ridge's justification to mine these three longwall panels. We agree with the conclusion that mining longwall panels 18 through 20 as submitted should have no adverse effects on the dam structure or reservoir. The dam structure has seen no detectable affects from the mining of panel number 7. The proposed

panels are further distant from the reservoir and much further from the Grassy Trails Reservoir dam. Also, the new panel-barrier-panel design has reduced dramatically the amount and intensity of any mining induced seismicity or subsidence. Additionally, this mining plan will comply with the lease stipulation to not subside perennial streams, unless authorized, as the Left Fork Whitmore Canyon Stream will be under a barrier pillar and no full extraction mining is planned under the stream.

Approval: The R2P2 modification is hereby approved as submitted for longwall panels 18, 19, and 20 on the Federal coal lease UTU-78562. As the bleeder entries and the back ends of panels 19 and 20 are located on private coal lands, our approval is for the Federal coal lease and other authorizations are needed for the complete plan.

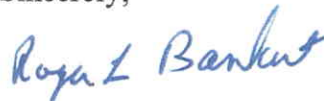
Maximum Economic Recovery (MER): The proposed plan to mine these three longwall panels will achieve MER for the Federal coal lease UTU-78562.

Recoverable Reserve Base: The recoverable reserves for the proposed three longwall block area was included in the provided and BLM reviewed August 25, 2009 reserve update for the West Ridge Mine. The recoverable reserve base for lease UTU-78562 is 12,540,390 tons (6,740,390 tons produced up to July 31, 2009 plus 5,800,000 estimated recoverable tons remaining from the August 25, 2009 update). Likewise, the recoverable reserve base for lease SL-068754 is 17,287,365 tons (12,327,365 tons produced up to July 31, 2009 plus 5,500,000 projected recoverable tons remaining from the August 25, 2009 update). If you have questions or different information on the recoverable reserve base, please contact us.

National Environmental Policy Act (NEPA): No new surface disturbance is predicted with this plan change, and therefore this action is Categorically Excluded from NEPA analysis as explained in the Department Manual (45 DM Part 516 11.5 (F)(8)): Approval of minor modifications to , or minor variances from, activities described in an approved underground or surface mine plan for leasable minerals (e.g., change in mining sequence or timing).

The BLM has determined that this modification complies with the Mineral Leasing Act of 1920, as amended, the regulations at 43 CFR 3480, and the lease terms and conditions. The modification to the R2P2 is approved as depicted on the enclosed mine map with the exception of the mining depicted up dip near the coal outcrop and mine portals. This area, as shown on the approved map, is still pending the addition of a lease modification application. If you have any questions, please contact Stephen Falk in the Price Field Office at (435)636-3605 or Jeff McKenzie of my staff at (801)539-4038.

Sincerely,



Roger Bankert
Chief, Minerals Branch

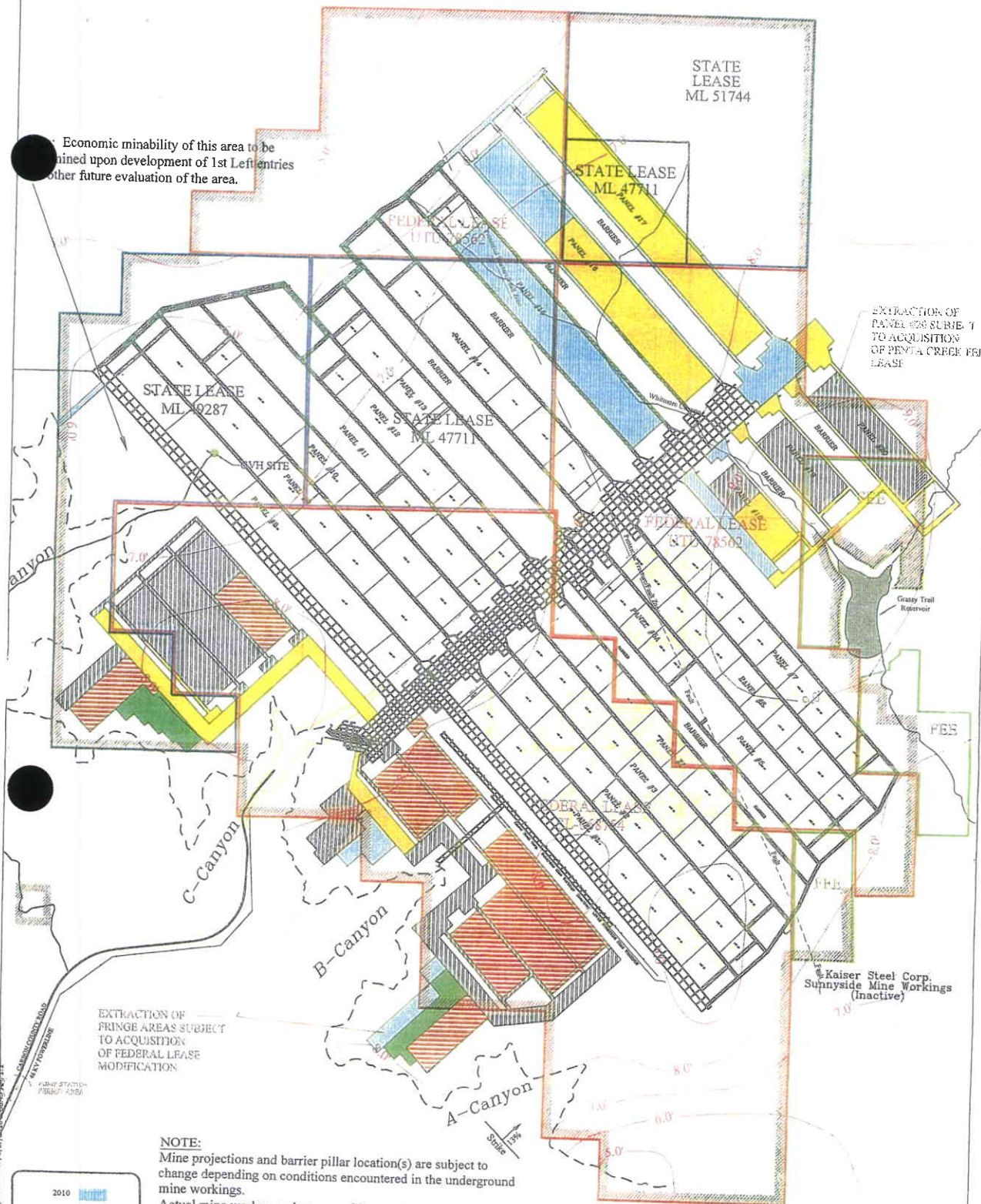
Enclosure
Approved Mine Map

cc: UT0070, Price Field Office (w/ encl.)

Daron Haddock, Coal Program Manager
Utah Division of Oil Gas and Mining (w/encl.)
1594 West North Temple, Suite 1210
Salt Lake City, Utah 84114-5801

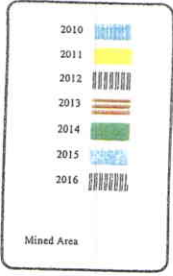
John Blake, Mineral Resource Specialist
State of Utah (w/encl.)
School and Institutional Trust land Administration
675 East 500 South, Suite 500
Salt Lake City, Utah 84102-2818

Economic minability of this area to be
 mined upon development of 1st Left entries
 other future evaluation of the area.



EXTRACTION OF
 FRINGE AREAS SUBJECT
 TO ACQUISITION
 OF FEDERAL LEASE
 MODIFICATION

NOTE:
 Mine projections and barrier pillar location(s) are subject to
 change depending on conditions encountered in the underground
 mine workings.
 Actual mine works are shown as of January 1, 2010.
 Mine projections depicted in the fringe areas beyond the existing
 permit area are speculative and based on future reserve
 acquisitions. No mining will be conducted in these areas unless
 those reserves are acquired in the future and permitted according
 to federal, state, and local permitting requirements.
 West Ridge Resources acknowledges that permission to mine
 within the permit boundary does not imply permission to mine
 beyond the permit boundary.



LEGEND:
 Permit Boundary
 Federal Lease
 State Lease (ML 49287)
 Penta Creek Fee
 Surface Facility Area
 GVH Site
 Outcrop

I CERTIFY THIS MAP TO BE TRUE AND CORRECT
 TO THE BEST OF MY KNOWLEDGE.



**MINING PLAN APPROVED BY
 BUREAU OF LAND MANAGEMENT**
 Recommended By: *[Signature]* 7/21/10
 Mining Engineer (Date)
 Approved By: *[Signature]* 7/21/10
 Manager (Date)

WEST RIDGE MINE R2P2 MODIFICATION Mining Projections (Extended Reserves)



**WEST RIDGE
 RESOURCES, INC.**

SCALE: 1"=2000'

APPENDIX 5-10
SITLA MINE PLAN APPROVAL

NOTE TO REVIEWERS:

ADD THIS TO END OF APPENDIX 5-10

STATE LEASE ML 51744
SITLA Lease Mine Plan

Approved: *[Signature]*
Utah School and Institutional
Trust Lands Administration

STATE
LEASE
ML 51744

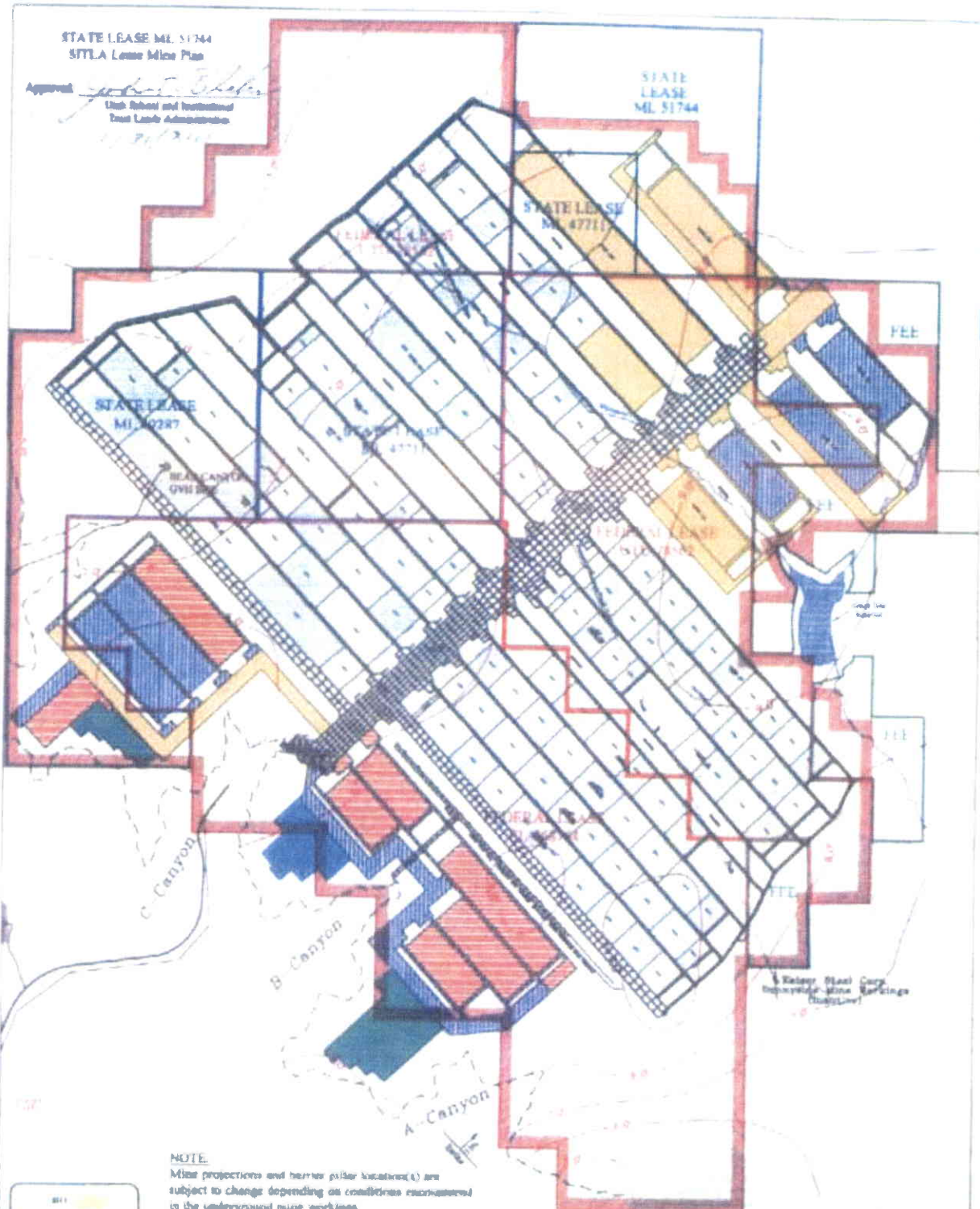
STATE LEASE
ML 47711

STATE LEASE
ML 49287

STATE LEASE
ML 47711

STATE LEASE
ML 47711

STATE LEASE
ML 47711



NOTE

Mine projections and barrier pillar locations are subject to change depending on conditions encountered in the underground mine workings. Actual mine works are shown as of January 23, 2011. Mine projections depicted in the fringe areas beyond the existing permit area are speculative and based on future reserve acquisitions. No mining will be conducted in these areas unless those reserves are acquired in the future and permitted according to federal, state, and local permitting requirements. West Ridge Resources acknowledges that participation in mine within the permit boundary does not imply participation in mine beyond the permit boundary.



WEST RIDGE MINE
Mine Plan

LEGEND

- Permit Boundary
- Federal Lease
- State Lease (ML 49287)
- Permit Creek Fee
- Surface Facility Area
- O&M Site
- Outcrop



WEST RIDGE
RESOURCES, INC.

SCALE 1"=2000'

APPENDIX 5-13A
GRASSY TRAIL MONITORING/INSPECTION PLAN
FOR PANEL BLOCK #18-21

APPENDIX 5-13A

GRASSY TRAIL MONITORING/INSPECTION PLAN
FOR PANEL BLOCK #18-21

APPENDIX 5-13A

**GRASSY TRAIL MONITORING/INSPECTION
PLAN FOR PANEL BLOCK #18-21**

GRASSY TRAIL DAM MONITORING NOTIFICATION LIST

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GRASSY TRAIL DAM MONITORING/INSPECTION PLAN PANEL BLOCK #18-21

(NOTE: The following monitoring plan was approved for and implemented during the previous mining of Longwall Panel #7, and has been updated accordingly for Panel Block 18-21.)

- *Prior to previous longwall mining of Panel #7, additional subsidence control monuments were established across the crest of the dam on 100' centers, across the face of the dam midway down the slope on 200' centers, and along the toe of the dam on 200' centers.*
- *Prior to previous longwall mining of Panel #7, the upper hillside accelerometer was removed, recalibrated, and relocated at the dam. The dam site accelerometer was removed, recalibrated, and relocated at a new location on the hillside approximately midway between the dam and the previous upper hillside location. In 2010, the hillside accelerometer was recalibrated and relocated northwest of the reservoir in the Left Fork of Whitmore canyon.*
- *Prior to previous longwall mining of Panel #7, a seepage collection system was installed at the seep area located along the east abutment of the dam. This system was designed to collect the entire flow of the seep to a common point to allow accurate measurement of the seepage flow.*
- *Prior to longwall mining of Panel Block 18-21 a complete set of premining baseline data will be established including:*
 - Peizometer readings.*
 - Accelerometer readings.*
 - Inclinometer readings.*
 - Relative elevations of all subsidence monitoring monuments located on the dam. (Absolute elevations of all monuments will be surveyed before, during and after extraction of longwall Panel Block 18-21)*
 - Flow rates at the east abutment seep, west abutment seep, and toe drain.*
 - Visual inspection of the dam, seeps, and slide area.*
 - Electronic photographs at predetermined designated viewpoints.*
- *RB&G will be responsible for compiling and distributing the following weekly, monthly, and event-driven inspection and monitoring reports. These reports will be generated in an electronic format and emailed on a timely basis to the Division of Dam Safety, Division of Oil, Gas & Mining, Bureau of Land Management, East Carbon City, Sunnyside City, and WEST RIDGE Resources (herein after referred to as the designated parties).*

- **Weekly basis:** After longwall mining has commenced in Panel Block 18-21 the following monitoring will be done on a weekly basis:

-Site reconnaissance/visual inspection, including reservoir level (to be taken by RB&G Engineering and/or East Carbon City, in cooperation)

-Piezometer readings level (to be taken by RB&G Engineering and/or East Carbon City, in cooperation)

-Accelerometer readings (to be taken by RB&G)

-Flow rates at the east seep, west seep, and toe drains. (These flow rates will be determined by actual measurements not by visual estimates to be taken by RB&G Engineering and/or East Carbon City, in cooperation)

- **Monthly basis:** In addition to the weekly monitoring the following monitoring will be conducted on a monthly basis:

-Inclinometer readings (to be taken by RB&G)

-Relative elevations of subsidence monitoring monuments located on the dam. These surveys will be conducted by a registered professional surveyor under contract with West Ridge Resources.

-Electronic reporting (emails) of the monthly accelerometer, piezometer and inclinometer measurements will be prepared by RB&G Engineering and will be sent out on a monthly basis to the designated parties. Emails of the monthly monument measurements will be prepared by West Ridge Resources or its contracted surveyor and will be sent on a monthly basis to the designated parties. If conditions warrant, Division of Dam Safety may require more frequent reporting of any or all data.

- **Event-driven basis:** In addition to the weekly and monthly inspections the following measures will be taken on an event-driven basis:

-The University of Utah seismic readings will be monitored on a daily basis. This monitoring will be done by RB&G Engineering and/or West Ridge Resources, in cooperation. If any events are recorded greater than a magnitude 3.0 within 5 miles of the dam then, within 24 hours of such readings, a full site reconnaissance and visual inspection will be conducted, and accelerometer readings will be taken. If any accelerometer readings show a recorded value greater than 0.2g and/or 0.1g for any pga values

recorded at the dam, then inclinometer readings, piezometer readings and drainflow measurements (east seep, west seep, and toe drain) will be taken at that time. The results of these measurements will be emailed immediately by RB&G Engineering to all designated parties.

- *The standardized form of the inspection/monitoring reports is included as an attachment.*

NOTE 1 *Monitoring and reporting will continue on the prescribed weekly, monthly, and event driven basis during the mining of Panel Block 18-21 as long as seismic events continue to be recorded. Based on the results of the monitoring, Utah Division of Dam Safety has the authority to increase the level or frequency of monitoring at any time as required to ensure safety of the dam and reservoir. At such time that the frequency and magnitude of the events diminishes sufficiently the agencies (Dam Safety, DOGM, BLM, East Carbon City, and Sunnyside City) will make a collective consensus determination to reduce, modify, and/or eliminate the various elements of the monitoring program.*

NOTE 2 *In the 2005 approval of Panel 7, BLM added a special stipulation #17 to the federal lease related specifically to the Grassy Trail Reservoir, stating, "The Lessee is and will remain liable for any and all damages or hazardous conditions resulting from the mining operations under the lease." The latest 2010 BLM approval for panel block 18-20 contains reference to this same lease stipulation #17*

NOTE 3 *It should also be noted that, as with previous mining of panel 7, the Utah Division of Dam Safety will have authority to stop any longwall mining of panel block 18-21 if it determines that mining-related seismicity or subsidence is creating, or has created, an unacceptable level of risk to the Grassy Trail dam or reservoir, based on monitoring at the time.*

APPENDIX 5-16
GRASSY TRAIL SUMMARY REPORT
RB&G ENGINEERING, 2008

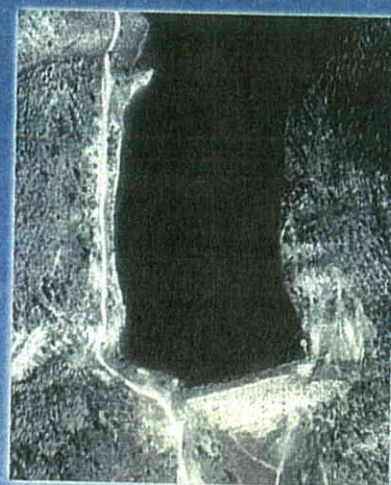
APPENDIX 5-16

GRASSY TRAIL DAM AND RESERVOIR
MINING-INDUCED SEISMICITY
SUMMARY REPORT, 2008

GRASSY TRAIL DAM AND RESERVOIR

MINING-INDUCED SEISMICITY

Summary Report, January 2008



Prepared for

WEST RIDGE
RESOURCES, INC.



RB&G
ENGINEERING, INC.

January 31, 2008

Dave Shaver
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Subject: Grassy Trail Dam and Reservoir
Mining-Induced Seismicity Summary Report


Gentlemen:

A Summary Report has been completed for the Mining-Induced Seismicity Study at the Grassy Trail Dam and Reservoir in Carbon County, Utah.

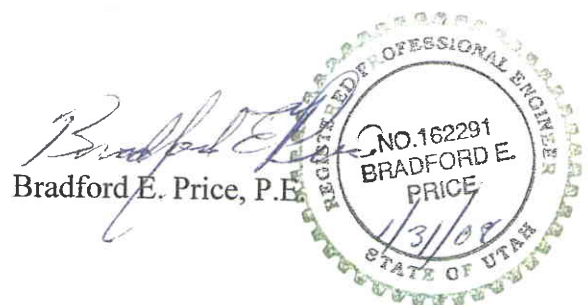
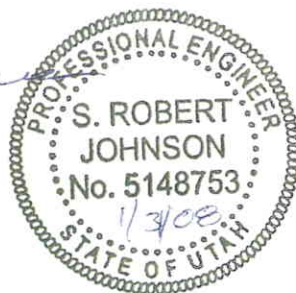
We appreciate the opportunity of providing this service for you. If there are any questions relating to the information contained herein, please call.

Sincerely,

RB&G ENGINEERING, INC.


S. Robert Johnson, P.E.

bep/jag



**MINING-INDUCED SEISMICITY
NEAR GRASSY TRAIL DAM AND RESERVOIR**
Carbon County, Utah

Summary Report – January 2008

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**MINING-INDUCED SEISMICITY
NEAR GRASSY TRAIL DAM AND RESERVOIR**
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RB&G
ENGINEERING, INC.

Summary Report – January 2008

1 INTRODUCTION

This report summarizes monitoring activities conducted at Grassy Trail Dam and Reservoir primarily between the months of August 2005 and January 2008. The primary purpose of this study has been to monitor the effects of mining-induced seismicity on the dam and reservoir during and following the mining of Panel 7 in West Ridge Mine.

1.1 Background

The project area is shown on Figure 1. Grassy Trail Dam and Reservoir are located in the Book Cliff Mountains in eastern Utah, about seven miles north of Sunnyside, Utah. The dam is located in Section 7, Township 14 South, Range 14 East, Salt Lake Base and Meridian. The multi-zoned earth embankment structure was completed in 1952 and is 89 feet high, with a crest length of about 600 feet. The reservoir has a design storage capacity at the spillway crest of about 916 acre feet, and supplies culinary water to the towns of Sunnyside and East Carbon.

RB&G Engineering performed a Dam Safety Study for the owner of the Grassy Trail Dam in 1979. In 1998, RB&G Engineering provided geotechnical engineering services relating to the Phase II Dam Safety Study for Creamer & Noble Engineers, requested by the Utah State Division of Water Resources. These services included installing instrumentation (piezometers and inclinometers) to allow monitoring of the embankment.

Agapito Associates, Inc. prepared a report for West Ridge Resources in November 2004 evaluating the estimated impacts to the Grassy Trail Reservoir due to longwall mining, which included the anticipated ground deformation at or near the reservoir as the soil and the rock subsided over the mined areas.

435 WEST 820 NORTH, PROVO, UTAH 84601-1343

In 2004, West Ridge Resources contracted with RB&G Engineering to provide engineering services including evaluation and monitoring of mining-induced seismicity (MIS) at Grassy Trail Dam and Reservoir. Additional instrumentation was installed to monitor ground shaking at the reservoir site. Instrumentation data obtained during mining of Panel 6 was summarized and presented in a report dated August 2005. This report included a discussion of potential impacts on the dam and reservoir during future mining of Panel 7, which was set to begin in December 2005 or January 2006. The report also provided recommendations for monitoring to be performed during mining of Panel 7.

A brief summary of the evaluations described in the August 2005 report is presented below:

- At its nearest point to the Grassy Trail Dam, the Panel 7 mining was to occur approximately 1664 feet vertically below the crest of the dam, and approximately 995 feet horizontally west of the dam's right abutment. This resulted in an anticipated minimum hypocentral (diagonal) distance of about 1939 feet between the dam and the closest point on Panel 7.
- Based on studies of mining-induced seismicity performed for the Joe's Valley/Trail Mountain area and consultation with authors of these studies (Walter Arabasz and Relu Burlacu of the University of Utah), a probable maximum magnitude of 3.9 was selected for engineering analyses. It was acknowledged that the likelihood of such an event during the mining of Panel 7 would be low, as no MIS event having a magnitude greater than 2.0 had been recorded in the area since the West Ridge Mine began operations in 2001.
- Based on a ground motion attenuation relationships developed by McGarr and Fletcher (2005) for low-magnitude, near-source mining-induced events, it was estimated that a peak ground acceleration (PGA) of 1.07g could occur at the reservoir if the probable maximum magnitude event occurred at the minimum hypocentral distance to the dam.
- Ground motions obtained from seismographs in the area were scaled to the maximum anticipated PGA value, and a Newmark Sliding Block analysis was performed to estimate potential deformation of the dam in the extreme design event. The analysis resulted in an estimated average embankment deformation of 5.4 inches, with a maximum deformation of 9.7 inches. If an additional 6 inches of

subsidence were assumed based on the Agapito report, the 7.5 feet of freeboard would only be reduced by about 1.3 feet, allowing a factor of safety of about 5.7 against overtopping following the estimated deformation and subsidence.

- For the maximum magnitude of vertical displacement described above, open joints and cracks in the embankment crest were not expected to propagate below the high water level.
- For seismic events having magnitudes less than 3.4, significant deformation of the embankment was not expected, even for events originating in the closest longwall panel. Based on the MIS history of West Ridge Mine, it was noted that mining conditions and operations did not appear conducive to event magnitudes greater than 2.0. It was recommended that mining operations be planned and executed in such a manner as to continue to minimize the magnitude of seismic events.
- Slope failures had been documented in areas above the abutments and the reservoir. These failures appeared to be shallow at the abutments, and continued movement of this type was not expected to impact the dam and reservoir, beyond minor maintenance.
- Landslide activity had been documented on the west rim of the reservoir, and the potential for further sliding was evident. An inclinometer was installed near the toe of this slide area to monitor further movement. As of August 2005, readings of this inclinometer suggested that some minor movement may have occurred since the inclinometer was installed in February 2005. It was noted that research of historic earthquake-triggered landslides indicates that earthquakes having magnitudes less than 4.0 are not likely to trigger landslides, even at epicentral distances as close as 100 meters (328 feet). It was concluded that the potential for landslide activity triggered by anticipated mining-induced seismicity is very low.
- Based upon the analyses presented in the report, it was considered unlikely that the anticipated mining-induced seismicity would impact the performance of the dam and reservoir. In order to verify the results of the analyses and protect against unforeseen conditions, it was recommended that an inspection and monitoring schedule be implemented when longwall mining activity occurs in Panel 6 and Panel 7. We recommended that the schedule include the following:

- Weekly site reconnaissance to observe any change of conditions in the embankment crest or slopes and landslide areas. Particular attention was to be given to cracking, ground deformation or seepage.
- Photographs were to be taken of areas of concern, particularly areas of slumping and seepage.
- Seepage collection and monitoring systems were to be installed and weekly measurements to begin at least one week prior to mining in Panel 7.
- Monthly measurement of inclinometers, piezometers, and ground motion monitoring devices.
- It was recommended that the instruments be sent to the manufacturer for recalibration, preferably one at a time such that one instrument would remain in operation continuously on the dam crest.
- Monthly survey of control points on the embankment and in the landslide areas. The installation and monitoring of additional settlement monuments was recommended for the dam crest, downstream slope, and toe.
- Daily monitoring of the UUSS list of recent seismic events (www.seis.utah.edu/reactivity/recent.shtml), including a daily record of the largest recorded event within 5 miles of the site.
- It was recommended that when an event greater than 3.0 occurs within 5 miles of the site, a site reconnaissance of the embankment crest, slopes and landslide areas be performed within 24 hours, along with seepage measurements and a review of ground motion recordings from the on-site instruments. If recorded ground acceleration exceeded 0.2g, instrumentation readings were to be performed as well.

1.2 Overview of Instrumentation

The locations of instrumentation used for the monitoring program are shown on Figure 2. A brief description of each type of instrumentation is provided below.

1.2.1 Ground Motion Monitoring Devices

Two Instantel MiniMate Plus (standard triaxial geophone) seismic monitoring instruments were first installed at the site in September 2004. Unit #BE9690 was installed on the crest of the dam. Unit #BE9698 was initially installed on the hillside approximately 900 feet west of the right (west) dam abutment, at an elevation of about 7900 feet.

The initial location of the hillside unit was selected such that the hypocentral (diagonal) distance between the unit and the nearest point mined on Panel 6 would be similar to the hypocentral distance between the right dam abutment and the nearest point to be mined on Panel 7. Following the initial monitoring during mining of Panel 6, the hillside unit was moved down the hillside to a location approximately 600 feet southwest of the right dam abutment, in order to better monitor ground motions that could affect the dam and reservoir.

It should be noted that the clocks on the ground motion monitoring devices have shown a tendency to lag behind the correct time, and have required correction after each download. The clocks have been observed to lose an average of about 4 minutes per month, which accounts for observed time differences between events recorded by the devices and University of Utah seismograph data.

1.2.2 Inclinerometers

Four inclinometers have been installed at the site. The first three of these instruments were installed in 1998, and included one inclinometer on the dam crest near the left (east) abutment, one on the dam crest near the right (west) abutment, and one on the hillside immediately west of the right abutment. A fourth inclinometer was installed in February 2005 along the road running along the west side of the reservoir. This instrument was installed to monitor slope movements near the toe of an apparent landslide mass.

Monitoring of the inclinometers involves lowering a probe into the pipe and recording the inclination of the probe at depth intervals of two feet. The readings from each site visit can be compared to show the lateral deflection on two perpendicular axes over time.

1.2.3 Piezometers and Observation Wells

Two observation wells and five piezometers were installed in the dam in 1998. These instruments were monitored on a regular basis during the summer months between 1998 and 2005. Seven additional piezometers were installed early in 2005 to allow more thorough monitoring of seepage in the dam. In January 2006, two more piezometers were installed near the dam's right abutment. The water levels in piezometers and observation wells have generally been measured at weekly intervals since the beginning of summer of 2005.

1.2.4 Seepage Monitoring Points

Seepage monitoring points include the toe drain installed during construction of the dam, a seepage collection system constructed on the left abutment in November 2005, and a seepage collection area on the right abutment along the west side of the road. Seepage points on the dam have generally been monitored at weekly intervals since November 2005.

1.2.5 Survey Points

Survey monitoring points at the reservoir include subsidence points and instrumentation boxes on the dam itself, as well as 33 points located on the hillside west of the reservoir.

1.2.6 UUSS Data

The University of Utah Seismograph Station (UUSS) internet site has been monitored daily throughout the study. Station BCE was installed above the West Ridge Mine and began operation in August 2003.

1.3 Mining Timeline and Proximity to Reservoir

Figure 3 shows the locations of West Ridge Mine Panels 6 and 7 relative to Grassy Trail Dam and Reservoir. This figure includes the dates of completed mining for about half of Panel 6, as well as the dates that mining in each area through Panel 7 was expected to occur, as of June 2005. Figure 4 is a cross section illustrating the location of Panel 7 with respect to the dam. It will be noted that the coal seam to be mined lies 1664 feet vertically below the crest of the dam. The nearest point on Panel 7 lies 995 feet horizontally west of the dam's right abutment.

The actual dates of mining in Panel 7 (through August 7, 2006) are shown on Figure 5. The mining of this panel commenced in early December of 2005, and the shortest horizontal distance between the dam and the active mining occurred around the first week of March, 2006.

Following completion of Panel 7, the mining operation moved to a new panel located between 1.5 and 3 miles west of the reservoir (north of the previously-mined panels). The projected areas to be mined in the next five years are shown on Figure 6. From this figure, it appears that future mining will gradually progress in an easterly direction, moving closer to the reservoir. The potential future mining of panels located as close to the reservoir as Panels 6 and 7 is not projected to occur until the year 2012.

2 PRESENTATION OF MONITORING DATA

Summaries of monitoring data obtained from seismic ground motion instruments, inclinometers, piezometers, seepage monitoring points, and survey points are presented in the appendix of this report. This section discusses the apparent correlations between the mining operations at West Ridge Mine and the data collected at Grassy Trail Dam and Reservoir.

2.1 Ground Motion Monitoring Devices

The MiniMate geophones have provided monitoring of ground motions at the site since January 2005. Each instrument has been sent to the manufacturer for re-calibration twice during this time period. In each case of re-calibration, one device was left in operation while the other was being re-calibrated, to ensure that at least one device would be present at the site at all times to provide continuous data during the full duration of the study.

Tables and graphs summarizing the MiniMate data are included in Appendix A of this report. A summary of the number of events per month and the characteristics of the largest event each month is tabulated on Table A-1.

The number of seismic events recorded per day since January 2006 are plotted on Figure A-1. The number of events per day reported by the UUSS are also plotted on this figure. The figure shows that the dam and hillside seismic units recorded the most daily events during March and April 2006. The daily number of events recorded at the reservoir decreased through the summer of 2006. In contrast, the maximum number of daily earthquakes recorded by UUSS occurred in the months of July through September 2006. These trends are also illustrated on Figure A-2, which shows events per week rather than events per day.

Figure A-3 shows the number of events recorded weekly at the reservoir during 2006, as well as the approximate horizontal distance from the mining to the dam at a given time. The number of events detected at the reservoir appears to be a function of the proximity of recent mining. This figure shows that the maximum number of weekly events at the reservoir does not directly coincide with the closest distance to the ongoing mining. Instead, the period of

most frequent events lags several weeks behind the period of nearest mining activity. This lag time is likely caused by the tendency of the longwall ceiling to hang up for a period of time while building up stresses sufficient to collapse a portion of the roof.

The maximum weekly peak ground acceleration values recorded at the reservoir are plotted versus time on Figure A-4. The time period during which the greatest acceleration values were recorded corresponds approximately with the time period of closest mining (February through April 2006). A maximum PGA value of almost 0.35g was recorded at the hillside instrument on March 11, 2006 during mining of Panel 7. The March 11 event had a magnitude of 2.6, which is the largest magnitude reported for the Grassy Trail and West Ridge vicinity during the 2005-2007 monitoring work. The PGA value recorded by the instrument on the dam during this event was 0.27g.

It is interesting to note that the PGA values recorded during the March 11, 2006 event were about ten times the maximum PGA value recorded during mining of Panel 6. It should also be noted that the maximum event magnitude reported during mining of Panel 6 was 2.0, while the March 11, 2006 event had a substantially larger magnitude of 2.6. It is likely that the closer proximity of Panel 7 and the larger event magnitude both contributed to the dramatic increase in peak acceleration values. Potential reasons for the larger acceleration value associated with the March 11 event are discussed in greater detail in Section 3 of this report.

2.2 Inclinerometers

Figure 3 shows the location of each inclinometer. Data from the four inclinometers at the reservoir are compiled in Appendix B. A discussion of data obtained from each inclinometer is presented below.

2.2.1 *Inclinometer 1*

Inclinometer 1 was installed at the easterly (left) end of the dam in 1998. This inclinometer extends through approximately 48 feet of dam embankment fill and into the

foundation to a total depth of about 107 feet. The positive "A" axis of this inclinometer pipe is oriented into the abutment toward the southeast, and the positive "B" axis is oriented downstream to the southwest. Deflection profiles recorded by Inclinometer 1 are shown on Figure B-1. This figure shows that the uppermost 2-foot deflection interval shows substantially greater deflections than the rest of the readings. This observation indicates only that the pipe is not rigidly confined in the soil in the upper few feet, and is not an indicator of significant ground movements.

With the exception of the uppermost point, the deflections recorded along either Inclinometer 1 axis is less than about 0.2 inch. The maximum deflection was measured on July 14, 2006 and was observed to be in a northerly direction, which is contrary to most of the previous readings showing slight deflections tending to the southwest. A later measurement recorded in October 2006 showed a profile similar to those recorded prior to July 14. The October profile, along with profiles from earlier measurements, suggests that the July 14 profile is likely in error. The magnitudes of the Inclinometer 1 displacements are small, and do not exhibit a significant tendency toward instability in this area.

2.2.2 *Inclinometer 2*

Inclinometer 2 was installed near the west (right) end of the dam in 1998. This pipe extends to a total depth of 128 feet, including approximately 120 feet of embankment fill and underlying foundation soil before penetrating about 8 feet into sandstone bedrock. This inclinometer is oriented such that positive movement on the "A" axis indicates movement into the west abutment, and positive movement on the "B" axis is upstream toward the reservoir.

Deflection profiles for the "A" and "B" axes are shown on Figure B-2 in Appendix B. The inclinometer pipe has deflected approximately 3.5 inches in the negative "A" direction, with the large majority of this deflection having occurred between December 2005 and August 2006. The profiles also show deflection of about 0.7 inch in the positive

“B” direction to have occurred over approximately the same time period. In both cases, the profiles appear to be relatively stable since the end of the summer in 2006.

The shapes of the deflection profiles are relatively consistent for the various dates that measurements were recorded. On both axes, the deflections below a depth of 120 feet are minimal. The deflection on the “A” axis increases in an approximately linear fashion between depths of 120 and about 66 feet, with the exception of a relatively abrupt increase between depths of 114 and 112 feet. Profiles measured after summer of 2006 show a deflection difference of about 0.4 inch between depths of 114 and 112 feet. Above a depth of 66 feet, the measured deflection is relatively consistent, indicating very little relative deflection between a depth of 70 feet and the top of the dam.

The deflection on the “B” axis is somewhat abrupt between depths of 120 and 110 feet, followed by a near linear trend of gradually increasing deflections between 110 and 45 feet. Above a depth of 45 feet, the “B” axis profile is marked by a an opposite near linear trend of decreasing deflections, such that the deflection at the top of the pipe is very small (less than about 0.2 inch) relative to the bottom of the pipe. The resulting profile appears to “bulge” along the positive “B” axis, with the maximum deflection of 0.7 inch occurring at a depth of about 44 feet.

The deflected shape of Inclinometer 2 on October 28, 2006 relative to a baseline shape measured on July 20, 2004 is shown in plan view on Figure B-3. The figure shows that the measured deflections are oriented primarily along the dam axis from the west (right) abutment toward the maximum section to the east. The slight “bulging” noted on the “B” axis profile is in the upstream direction.

Figure B-4 shows deflections along the “A” axis of Inclinometer 2 plotted versus time. The blue line is a plot of relative deflection between depths of 44 and 122 feet. Lines showing deflections between depths of 66 and 120 feet, as well as the 120 to 126-foot depth interval and several shallower depth intervals, are also shown. It is apparent from the figure that the relative deflection measured along the ‘A’ axis was minor at depths above 44 feet and below 122 feet.

The dates on Figure B-4 can be compared to the dates at which mining occurred closest to the dam. Some lateral deflection (0.4 inch over the 44 to 122-foot depth interval) occurred during Panel 6 mining in 2005. Much of the 2005 deflection occurred during the first half of the year, and measurements after June appear to demonstrate a decreasing rate of deflection. By November 2005, the ongoing deflection appears to be negligible.

As mining commenced in Panel 7, the deflections measured in Inclinator 2 began to increase substantially, with the greatest deflections occurring during and immediately following the period of shortest distance between the mining and the dam. By August 2006, the ongoing deflections were very small.

There appears to be a very strong correlation between the deflections measured by Inclinator 2 and the proximity of longwall mining. The larger magnitudes of events recorded during Panel 7 mining compared to Panel 6 mining may also contribute to the larger lateral deflections observed during Panel 7 mining.

2.2.3 *Inclinator 3*

Inclinator 3 was installed in the dam's right (west) abutment in 1998. This pipe extends through about 7 feet of clayey overburden soil, underlain by predominantly mudstone to about 42 feet, and terminates after penetrating about 11 feet into sandstone at a total depth of 53 feet. The positive "A" axis of Inclinator 3 is oriented predominantly away from the dam and 20 to 25 degrees upstream of the dam axis. The positive "B" axis is oriented predominantly upstream toward the reservoir.

Profiles of deflection measurements recorded at Inclinator 3 are shown on Figure B-5. The deflection shape shown for the "A" axis is relatively irregular, with zones of both positive and negative deflections at varying depths. The deflections are predominantly in a positive direction below 45 feet, negative between 45 and 33 feet, positive between 33 and 20 feet, negative between 20 and 13 feet, and positive again above a depth of 13 feet.

The peak deflection in each zone is generally about 0.2 to 0.3 inch, with a maximum deflection approaching 0.5 inch at the top of the pipe.

The "B" axis shows very small deflections below a depth of about 43 feet. Above 43 feet, the deflection profile is characterized by a roughly linear increase to about 0.3 inch at the top of the pipe.

Figure B-6 is a plan view of the deflection measurements in Inclinator 3. The predominant plane of back-and-forth lateral deflection is parallel to the dam axis, but an overall movement in the upstream direction is also apparent.

The irregular shape of the "A" axis deflection profile may be caused by compressional deformation of the pipe. An alternative explanation could be that various layers of rock are shifting independently from one another.

Figure B-7 shows the deflection for the various depth intervals plotted versus time. On this figure the trend is very similar to that shown for Inclinator 2 on Figure B-4. Again, it appears that relatively small lateral ground movements occurred at the abutment during mining of Panel 6 in 2005, followed by larger deflections occurring during Panel 7 mining. As was the case with Inclinator 2, the rate of deflection at Inclinator 3 was very small during periods of limited or more distant mining activities, such as November-December 2005 and after August 2006.

The deflections measured at Inclinator 3 are substantially smaller than those measured at Inclinator 2; however, it should be noted that the bottom eight feet of Inclinator 2 appear to be fixed in place, suggesting that the pipe may be anchored in a stationary stratum. By contrast, Inclinator 3 shows deflections beginning at the deepest measurement interval (51 to 53 feet). This observation suggests that the bottom of the Inclinator 3 pipe may not be anchored as the Inclinator 2 pipe appears to be. The deflection measurements for this pipe could be relative to a non-stationary bottom point, and it may not be appropriate to interpret the deflections shown for Inclinator 3 as absolute deflections.

2.2.4 *Inclinometer 4*

Inclinometer 4 was installed in February 2005 on the west rim of the reservoir upstream of the dam. This instrument is located immediately west of the roadway in the lower portion of an apparent slide mass. The pipe extends through approximately 37 feet of soil and penetrates about 30 feet into the underlying bedrock to a total depth of 67 feet. The positive "A" axis for this inclinometer is oriented in an easterly direction toward the reservoir. The positive "B" axis points downstream toward the dam.

Deflection profiles for Inclinometer 4 are shown on Figure B-8. The profile for the "A" axis exhibits a distinct down-slope displacement between the depths of 61 and 63 feet. Over time, the magnitude of this displacement has increased to approximately 0.3 inch. The maximum displacement is located at a depth of 59 to 60 feet, and the lateral displacement tends to decrease gradually coming up the pipe from that depth. This deflected shape suggests a discrete failure surface at a depth of about 62 feet, with a slight backwards rotation of the moving mass. The larger displacements shown in the upper 3 feet indicate that the top of the pipe is somewhat loose or influenced by shallow ground movement at the edge of the roadway.

The boring log recorded during installation of Inclinometer 4 shows that the bedrock above a depth of 64 feet is primarily mudstone. The log notes that clay seams were present in the mudstone core sample retrieved from a depth of about 61 to 64 feet. The log also shows sandstone below a depth of about 64 feet. Based on the boring log and the observed deflections, it appears that the slip surface is located within the mudstone layer with clay seams encountered immediately above the sandstone.

The "B" axis of Inclinometer 4 shows relatively small displacements, with the exception of the near-surface deflections in the upper 3 to 4 feet. The pipe appears to be anchored and stationary from depths of 79 to 63 feet, with a slight discrete deflection in the downstream direction between 63 and 61 feet. This deflection tends to reverse to the upstream direction between 41 and 43 feet. The deflections on the "B" axis tend to go

back and forth over time, and it is possible that the deflections shown are of a small enough magnitude to be within the accuracy limits of the instrument.

Figure B-9 shows a plan view of the Inclinator 4 deflection measurements. Disregarding the outlying points at depths of 1 and 3 feet, the deflection is predominantly eastward down the slope and into the reservoir, as would be expected.

The deflection of Inclinator 4 along the "A" axis is plotted versus time on Figure B-10. The same trend observed at Inclinator 2 and 3 is also apparent at Inclinator 4. One notable difference is that the deflections attributable to mining of Panel 7 appear to subside several months earlier (around June 2006) at Inclinator 4, while they continue until about August in the west abutment area of the dam. The approximate zones of mining during which the most significant deflections occurred at Inclinator 2, 3, and 4 are shown on Figure B-11. This different influence zone for Inclinator 4 suggests that the slide mass monitored by Inclinator 4 may be less sensitive than the west abutment area to smaller ground motions originating at a greater distance. Another possible explanation is that the displacements measured prior to June 2006 may have moved the slide mass into a more stable position, thereby increasing the threshold level for ground motions to cause significant displacements.

2.3 Piezometers and Observation Wells

The dam has been heavily instrumented with piezometers and observation wells to allow careful monitoring of any changes in seepage behavior. The locations of these instruments are illustrated on Figure 3, and the piezometer and well readings are summarized in Appendix C of this report.

As noted previously in this report, Observation Wells 1 and 4 and Piezometers 2, 3, 5, 6, and 7 were all installed in 1998. During the initial Mining-Induced Seismicity study (2005), it was noted that the historical readings from at least one of these instruments (Observation Well 1) were very erratic. Piezometers 8 through 14 were installed early in 2005 to verify the readings of the existing instruments and to allow monitoring at a greater number of locations and depths. After mining of Panel 7 was completed and inclinometers showed evidence of

displacement at the west (right) abutment, Piezometers 15 and 16 were installed at the right abutment to more closely monitor seepage at that location. It should be noted that some piezometer locations have two piezometer tips, with one tip located below the dam in the foundation material, and a shallower tip located within the embankment.

The water elevation in each piezometer is plotted versus time on Figure C-1. The tip elevation for each instrument is marked at the beginning of the plot. The water elevation in the reservoir on the date of each reading is also shown on this figure. From 1998 to 2004, water level measurements were generally recorded frequently during the summer months but very infrequently during the winter. As would be expected, the water level in the reservoir is typically at its highest in the spring of each year, with a slight drawdown occurring over the summer and into the fall months. It is notable that the reservoir is generally drawn down only 6 to 12 feet below the spillway elevation in the course of a year.

Figure C-1 shows that the water levels in the piezometers and observation wells generally rise and fall with the water elevation in the reservoir. The one exception is Observation Well 1 (OB-1), which had very erratic measurements from 1998 and 2004. Some effort was made to flush out this well in 2005. Readings since that time have been substantially less erratic, but still more irregular than those of the other instruments.

The general consistency of the water level readings, with seasonal fluctuations corresponding to the reservoir level, is indicative of consistent seepage conditions within the dam and foundation. No substantial or unusual changes in these water levels have been noted, despite the lateral displacements indicated by the inclinometers at the west abutment.

2.4 Seepage Monitoring Points

Seepage through the dam, foundation, and abutments is collected at three locations, including the toe drain connected to the dam's internal drainage system, a seepage collection system located on the east (left) abutment, and a collection pipe located on the west (right) abutment. The flows from the drains are measured by recording the time to fill a container of known volume with water from each collection point. The clarity of the water has also been

recorded during seepage readings. Clear seepage water indicates that the flow is adequately filtered and is not moving material through the dam or foundation. Cloudy seepage water could be a sign of internal erosion, which could lead to a piping-related failure of the structure.

The seepage flows from each drain are plotted along with the water surface elevation on Figure C-2 in Appendix C. From the figure it is apparent that the reservoir surface fluctuated between about elevation 7586 feet in the winter months to about elevation 7592.5 feet in the summer months in 2006 and 2007. The seepage rates measured at the drains appear to correlate with the reservoir water level, with the greater flows occurring during periods of higher water elevations in the reservoir.

The greatest flows were measured at the left abutment. The left abutment seepage collection system was constructed in November 2005 to collect water that was seeping through the left abutment and causing some instability of the overburden soils in this area. The seepage from this drain generally varied between about 10 and 20 gallons per minute.

The water in these drains was generally frozen in the winter months, and negligible flows were noted at these times. Flow rates ranging from about 2 to 6 gallons per minute were typically recorded during warmer periods.

2.5 Survey Points

West Ridge Mine contracted with Ware Surveying to provide surveys of points on the dam and the slopes west of the reservoir at various times throughout the monitoring program. The intent of these surveys has been to monitor movements of the slide areas and to verify that significant movements of the dam itself do not occur. Data obtained from the surveys is summarized in Appendix D of this report.

2.5.1 *Survey Points on Hillside West of Reservoir*

Figure D-1 shows the survey points located on the hillside slopes west of the reservoir. Points 1 through 14 form a rough line down the hillside in the slide area above the dam. Points 30 through 49 form a similar line for tracking movements of the hillside near the upper end of the reservoir. The coordinates surveyed for each point on six dates between September 2004 and May 2007 are shown on Table D-1.

The changes in the surveyed northing, easting and elevation coordinates for points 1 through 14 are plotted on Figures D-2a, D-2b, and D-2c, respectively. It will be noted from Figure D-2a that the uppermost points (Points 1 through 8) do not exhibit a clear trend of displacement in any particular direction. Point 1 shows a northerly displacement greater than one foot in the August 2005 survey, but returns to very near its original position in the following survey. The displacement of Point 1 shown in August 2005 is likely an error in the survey or in data tabulation.

The lower points on the hillside above the dam (Points 9 through 14) appear to have undergone northerly displacements in the order of 0.25 to 0.5 foot during the 2006 mining work. Figure D-2b shows that all of the points in the group above the dam experienced easterly displacements of about 0.6 to 1.2 feet during this same time period. Figure D-2c shows the same trend, with the elevations of the points decreasing by about 0.5 to 1.8 feet between August 2005 and October 2006. The change in elevations was more pronounced at the uppermost points, and generally decreased at points closer to the dam. All coordinates show substantially less movement during the last survey interval (October 2006 to May 2007) after mining of Panel 7 was essentially complete.

The changes in the surveyed northing, easting, and elevation coordinates for Points 30 through 49 are plotted on Figures D-3a, D-3b, and D-3c. The northing coordinates of these points show a tendency to move south during 2005 and into April of 2006, followed by a more northerly motion between April and October 2006. The changes in the northing coordinates are less than 0.5 foot. The easting coordinates are relatively stable

until the April to October 2006 interval, at which time most of these coordinates show an eastward shift ranging from about 0.4 to 0.7 feet. It is noted that the two lowest points on the slope (44 and 45) moved very little over this time interval, suggesting that the activated slide mass ends somewhere between points 43 and 44.

The elevations of points 30 through 49 show a general trend of downward displacement between December 2004 and October 2006, with the greatest movements typically measured over the last six months of this period. The total change in elevation coordinates ranged from almost a foot at the upper end of the group to less than 0.2 foot at the lower end. As was the case with Points 1 through 30, the coordinates of Points 30 through 49 show very little movement between October 2006 and May 2007, after mining of Panel 7 was complete.

2.5.2 *Straight-Line Survey of Dam Crest*

Appendix D also contains a description of straight-line surveys performed by Ware Surveying at the request of the mine (See Exhibit D-1). This survey work involved setting a monument on the east dam abutment to line up with a number of the instrumentation covers along the dam crest. Between May and December 2006, this line was surveyed at least monthly (more frequently between May 26 and August 11) to verify that none of the points on the dam crest moved downstream or upstream relative to the benchmark and the other points.

Beginning in December 2006, the horizontal distance from the benchmark to each of the points was also surveyed to check for displacements along the dam crest parallel to the dam's longitudinal axis. This straight-line survey effort has continued at approximately monthly intervals since that time. The locations of the straight-line survey points are identified with the prefix "MW" on Figure D-4 in Appendix D. A summary of surveyed distances through October 2007 is shown on Table D-2. No noticeable transverse movement has been identified over the time period that the straight-line survey has been performed. No significant longitudinal movement along the dam axis has been measured since the distance measurements were first recorded in December of 2006.

2.5.3 *Settlement Monitoring Points on Dam Crest*

The points labeled with the prefix "C" on Figure D-4 are settlement monuments embedded in the crest of the dam. The elevations of each of these points have been measured over time using a differential level survey. Surveys were performed once each year between July 2002 and August 2005. Four surveys of these points were performed between March 21 and May 30, 2006, when mining was occurring near the dam in Panel 7. Additional surveys were performed in August and September, 2006, and in October 2007.

The surveyed elevations of the monuments on the dam crest are tabulated on Table D-3 in Appendix D, and the differences in elevation using the July 2002 survey as a baseline are plotted on Figure D-5. This figure shows that most of the elevation differences were less than 0.05 foot. The points located on the westerly half of the dam (C-1, C-2, C-3, and C-4) nearest the mining activities appear to have undergone some vertical displacement. Slight upward displacements are evident during mining of Panel 6 in 2005, with more significant displacements noted during mining of Panel 7 in 2006. The points on the easterly half of the dam (C-5, C-6, and C-7) appear to have undergone very little vertical displacement during the survey period.

Of particular interest is the 0.2-foot (2.4-inch) vertical displacement measured at point C-2. Most of this displacement was measured during mining of Panel 7. Point C-2 is located near Inclinator 2, which measured approximately 3.5 inches of lateral displacement toward the maximum section of the dam. It would appear based on these data that the west end of the dam was pushed slightly upward and to the east as mining was performed near the dam.

3 SUMMARY AND CONCLUSIONS

This section provides a brief summary of the findings of the monitoring data described in the previous section, and presents several conclusions that may be drawn based on this data. It should be noted that mining in the West Ridge Mine continues to occur, along with regular monitoring of impacts at the reservoir site. The current mining is at a much larger distance from the dam than Panels 6 and 7, but the distance between the reservoir and active mining areas is expected to decrease over the next several years. Data collected during this future mining will likely lead to some refinement of the conclusions presented below.

3.1 Mining-Induced Ground Motions at Grassy Trail Reservoir

The longwall mining operation performed in Panels 6 and 7 resulted in ground motions detected on the hillside west of the dam, as well as on the crest of the dam itself. The recorded mining-induced ground accelerations at the dam were relatively small during mining of Panel 6, and increased substantially during mining of Panel 7. The number of mining-induced events detected by instrumentation at the reservoir also increased substantially during Panel 7 mining. The increase in the number of events and the recorded acceleration levels appears to be strongly connected to the increased proximity of mining. There appears to be a lag of a few weeks up to several months between the time period of closest-proximity mining and the time of maximum mining-induced ground motions at the reservoir.

It was also noted that the earthquake magnitudes reported by the University of Utah during mining of Panel 7 were substantially larger (up to a magnitude of 2.6) than those reported during the mining of Panel 6 (maximum magnitude of 2.0). During a review meeting following the mining of Panel 7, it was suggested that as adjacent panels are mined, the potential area that can collapse at a given time becomes larger. When a panel is mined adjacent a previously mined panel, there is potential for collapse in both the first and second panels, increasing the width of mined area that could collapse at a given time. Collapse of a wider area would release more energy and be detected as a larger-magnitude event.

The larger area of mined space may have contributed to the larger events recorded during Panel 7 mining. The increase in event magnitudes from Panel 6 to Panel 7 may also be related to variations in cover depth, geologic features, mining practices, lag time in collapse of the mine roof behind the longwall operation, and/or other factors. It is interesting to note that, according to the Panel 7 mining dates shown on Figure 5, the distance mined during February 2006 was only about 75 percent of the distances mined in both January and March 2006. The apparent change in the rate of mining may have somehow contributed to the larger magnitude event reported on March 11. The slower mining rate in February could also indicate the presence of a geologic anomaly that may have affected the event magnitudes in this area. Determining the most likely causes of the larger-magnitude events during Panel 7 mining is beyond the scope of this report; however, the increased event magnitudes undoubtedly contributed to the larger ground motion values recorded at the dam site.

The August 2005 Mining-Induced Seismicity Study used an attenuation relationship developed by McGarr and Fletcher (2004) to estimate the potential range of ground accelerations for mining-induced events near Grassy Trail Reservoir. The March 11, 2006 event of magnitude 2.6 was likely caused by collapse of the mine ceiling over the area mined in the previous weeks and months. It is our understanding that the area of Panel 7 nearest the dam was mined in February and March of 2006. The estimated hypocentral distance from the nearest mined area to the hillside ground motion instrument during this time ranges from about 1700 to 2200 feet. For a magnitude 2.6 event occurring within this range of distances, the McGarr-Fletcher equation predicts peak ground accelerations in the order of 0.05 to 0.1g.

For the March 11, 2005 event, the McGarr-Fletcher relationship under predicts the recorded ground motion at the dam site by a factor ranging from 3 to 7. This discrepancy does not necessarily indicate that the attenuation equation is not a useful tool for predicting ground motions at the West Ridge / Grassy Trail site. In fact, McGarr and Fletcher noted that only 68% of the peak acceleration data from which the equation was developed were within a factor of 3 of the values predicted by the equation. Considering the scatter in the Trail Mountain data used to develop the equation, along with the differences in conditions at Trail Mountain compared to conditions at West Ridge, the under prediction of the March 11, 2006

acceleration value is not surprising. However, this case does underscore the importance of using caution and judgment in any efforts to predict ground motions.

3.2 Permanent Ground Deformations at Grassy Trail Reservoir

3.2.1 *Grassy Trail Dam Embankment and Abutments*

The inclinometer located at the left (east) abutment did not show substantial deflections as a result of the mining-induced ground motions. The inclinometers at the right (west) abutment did measure deflections. Inclinometer 2 extends through the embankment and into the foundation, and lateral deflection of up to 3.5 inches has been recorded in a direction parallel to the dam axis moving away from the west abutment. The 3.5-inch deflection does not occur at a discrete depth as would be expected where a defined failure surface exists. Instead, the deflection occurs gradually between depths of about 120 and 66 feet. Inclinometer 3 is located in the west abutment and shows both positive and negative deflections in different depth zones. The maximum deflection magnitude measured in this inclinometer is about 0.4 inch. The unusual deflection profile may be indicative of compressional forces on the inclinometer pipe. It is possible that the bottom of this pipe is not fixed into stationary material, and the actual deflections may be substantially different than the deflections relative to the bottom of the pipe as shown on the inclinometer profiles.

Both Inclinometers 2 and 3 exhibited some deflection during mining of Panel 6, with the deflection rate decreasing as mining moved farther away to the north and west of the dam. Deflection rates near the end of Panel 6 mining (Nov-Dec 2005) were minimal. The deflections began to increase as mining began in Panel 7, with the peak deflection rates occurring in the weeks and months following mining at the closest distance from the dam. The deflection rate decreased substantially as mining in Panel 7 moved away from the dam in the latter part of 2006; however, there is some evidence of very slight deformations continuing into the following year.

The displacements measured at Inclinometers 2 and 3 are predominantly directed along the dam axis toward the maximum section of the dam. The earthfill dam embankment has

a buttressing effect on motions in this direction, and deflections in this direction are of somewhat less concern, with respect to embankment stability, than deflections indicating movement perpendicular to the dam axis.

Settlement monument C-2, near the west end of the dam, showed slight signs of upward movement during Panel 6 mining, followed by more significant upward movement during mining of Panel 7. The monument elevation has increased about 2.4 inches. This observation, along with the observed lateral movement of 3.5 inches, suggest that movement in the west abutment area has pushed the west abutment several inches upward and toward the east.

The straight-line survey work conducted beginning in May 2006 has reported no evidence of lateral movement of the dam crest in an upstream or downstream direction. The surveys of horizontal distances along the dam crest have not shown significant longitudinal movement along the dam crest since these distances were first surveyed in December 2006.

Concern has been expressed that the lateral movements measured along the dam axis at the left abutment may result in zones of tensional forces having a tendency to open up internal cracks in the dam and/or foundation. This is a valid concern, as seepage through such cracks could cause internal erosion and further open the cracks, resulting in progressively larger seepage through the dam and potential piping-type failure.

Several factors help diminish the likelihood of increased internal erosion developing in the areas of recorded lateral deformations. As noted in the August 2005 Mining-Induced Seismicity Report, the dam embankment materials are predominantly lean clay, clayey sand, and clayey gravel, and our investigations have found that the soils in the outer downstream zone are similar to those in the central core of the dam. The foundation soils also contain significant percentages of clay and silt, and the near-surface bedrock is predominantly shale with some weathered sandstone. The clayey embankment and foundation soils, as well as the shale bedrock, have self-healing characteristic. Small cracks in these materials tend to fill in with the surrounding material, reducing the

potential for piping through such cracks. The cumulative deflection measured in Inclinator 2 appears to occur gradually over a significant depth interval (about 50 to 60 feet), suggesting that tensile strains and resulting cracks at a given depth would be relatively small despite the cumulative deflection being of considerable magnitude.

The piezometer and drain measurements to date have not shown evidence of changes in seepage behavior through the dam, including the west abutment area. The water in the drains has been clear, and no reports of cloudy or discolored water indicative of internal erosion have been made. The dam appears to have performed well to date despite the measured lateral movement at the west abutment, and the dam and foundation materials are somewhat resistant to piping through small tensile cracks. Continued monitoring will be critical to verifying the long-term performance of the dam, and recommendations for future monitoring are outlined in Section 4 of this report.

3.2.2 Slide Areas on Hillside West of Reservoir

Inclinator 4, located upstream of the dam on the west rim of the reservoir, has shown discrete deflections of up to 0.3 inch at a depth of about 62 feet below the ground surface. Very slight deflections were measured at this depth during mining of Panel 6, but the large majority of this deflection occurred between February and June of 2006, when mining in Panel 7 was closest to the inclinometer. Measurements recorded since June 2006 suggest that this slide area has been much more stable since that time.

Points surveyed on the hillside west of the reservoir indicated substantial downslope movement (approaching 2 feet at some locations) during mining of Panel 7. These areas appeared to experience much less movement once mining of Panel 7 moved well away from the dam. These slides may become more active as future mining activities approach the reservoir and mining-induced ground motions again increase at the site. It should also be noted that increases in slide movement could occur due to other factors – such as above-average precipitation and changes in the moisture conditions in the hillside – that are entirely unrelated to the mining activities.

4 RECOMMENDATIONS

It is apparent from the data collected that mining activities in West Ridge Mine have caused mining-induced seismic events, and that ground motions caused by these events are detectable at Grassy Trail Dam and Reservoir. These ground motions have caused some measurable permanent deformations of the ground surface on the hillside west of the reservoir, as well as lateral deformations at the west end of the dam. Despite the recorded deformations, the dam appears to be performing well, and ongoing deformations have been very small since mining of Panel 7 concluded in the fall of 2006.

The inclinometers suggest that slight deformations (creep) may be ongoing at the dam's west abutment. Continued monitoring of these inclinometers is recommended to verify that the rate of this movement does not increase. Regular monitoring of piezometers and seepage collection points is also recommended to verify that the recorded lateral movements do not result in increased seepage and/or internal erosion of the dam. This monitoring is critical to ensure adequate long-term performance of the dam and the safety of people and facilities located downstream.

A meeting was held in November 2006 to review the data collected during the mining of Panel 7. The monitoring schedule developed in this meeting is included for reference as Exhibit E-1 in Appendix E of this report.

A meeting was held in October 2007 with representatives of the Utah State Dam Safety Office, the Bureau of Land Manage, the Utah Division of Oil, Gas, and Mining, East Carbon City, Sunnyside, City, West Ridge Mine, RB&G Engineering, and others in attendance. Based on this meeting and subsequent communication between the State Dam Safety Office, West Ridge Mine, and RB&G Engineering, the monitoring schedule included as Exhibit E-2 in Appendix E of this report was adopted until further notice. It is anticipated that the parties involved will meet yearly while mining continues, in order to review the monitoring data and update the monitoring schedule as needed. The frequency of monitoring may be increased at any time as dictated by unexpected changes in the monitoring data.

As noted in Exhibit E-2 in Appendix E, we will continue to perform daily reviews of the data on the UUSS web site. If an event of magnitude greater than 3.0 is reported within 5 miles of the dam, thorough site reconnaissance and reading of the ground motion instruments will be performed within 24 hours. Reading of all other instrumentation (inclinometers and piezometers) will also be performed if any recorded ground acceleration exceeds 0.2g.

The data collected to date can increase our understanding of the effects of mining-induced seismicity, and continued monitoring will supplement this database. Detailed reviews and analyses of these data may be performed to develop predictive relationships for use in future studies and planning. In particular, the data recorded at Grassy Trail Reservoir can be compared to the McGarr-Fletcher attenuation relationship that was developed based primarily on mining in the vicinity of Joe's Valley Reservoir. Refinement of the McGarr-Fletcher relationship may be possible, or a different site-specific relationship could be developed for the West Ridge / Grassy Trail location. In any case, it should be noted that the accelerations recorded at a given location are likely a function of many unknown and/or poorly understood site-specific factors, and attenuation relationships should be used to predict ground motions only with a great deal of caution and judgment.

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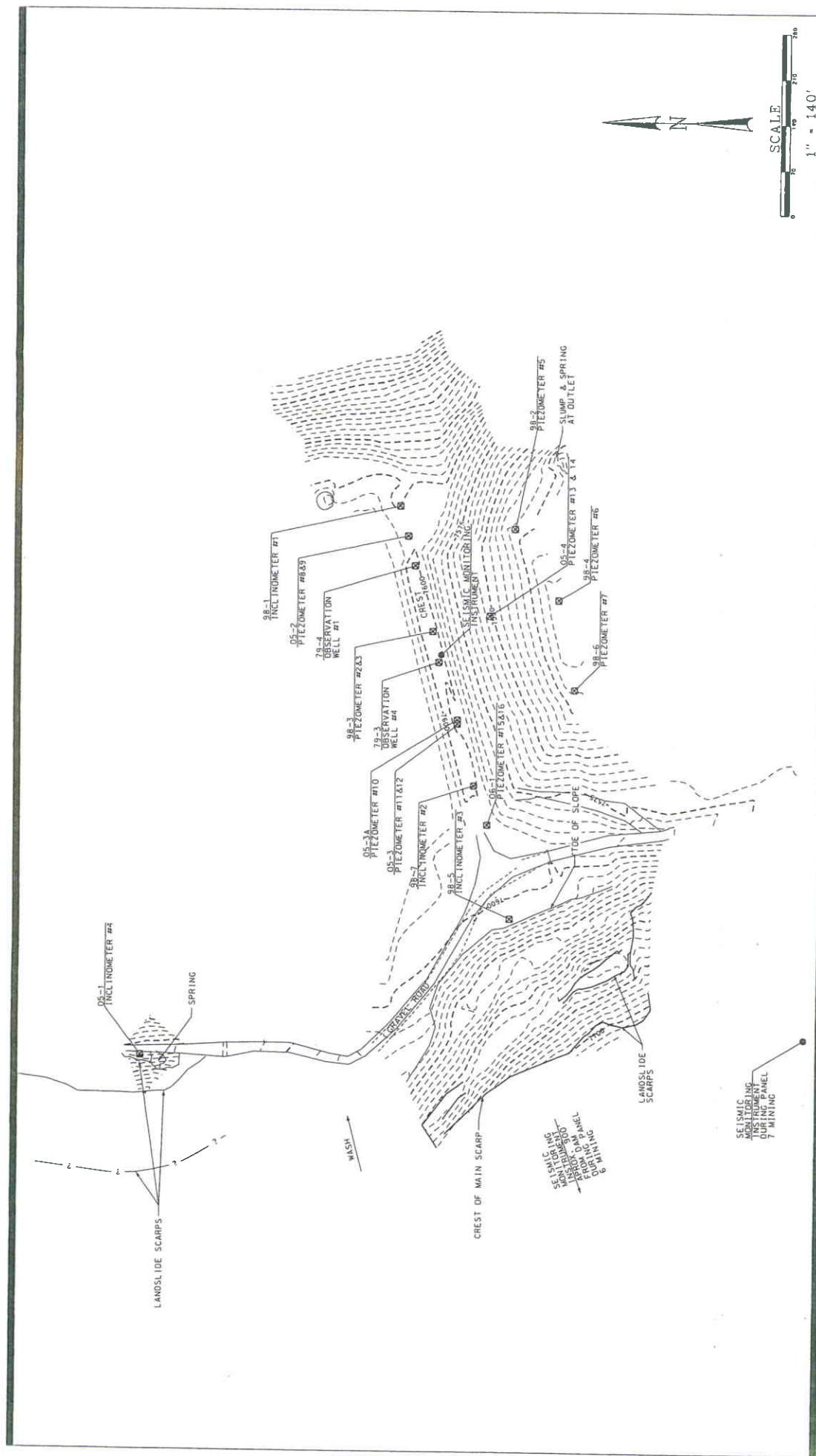


Figure 2

LOCATION OF INSTRUMENTATION

GRASSY TRAIL DAM
CARBON COUNTY, UTAH

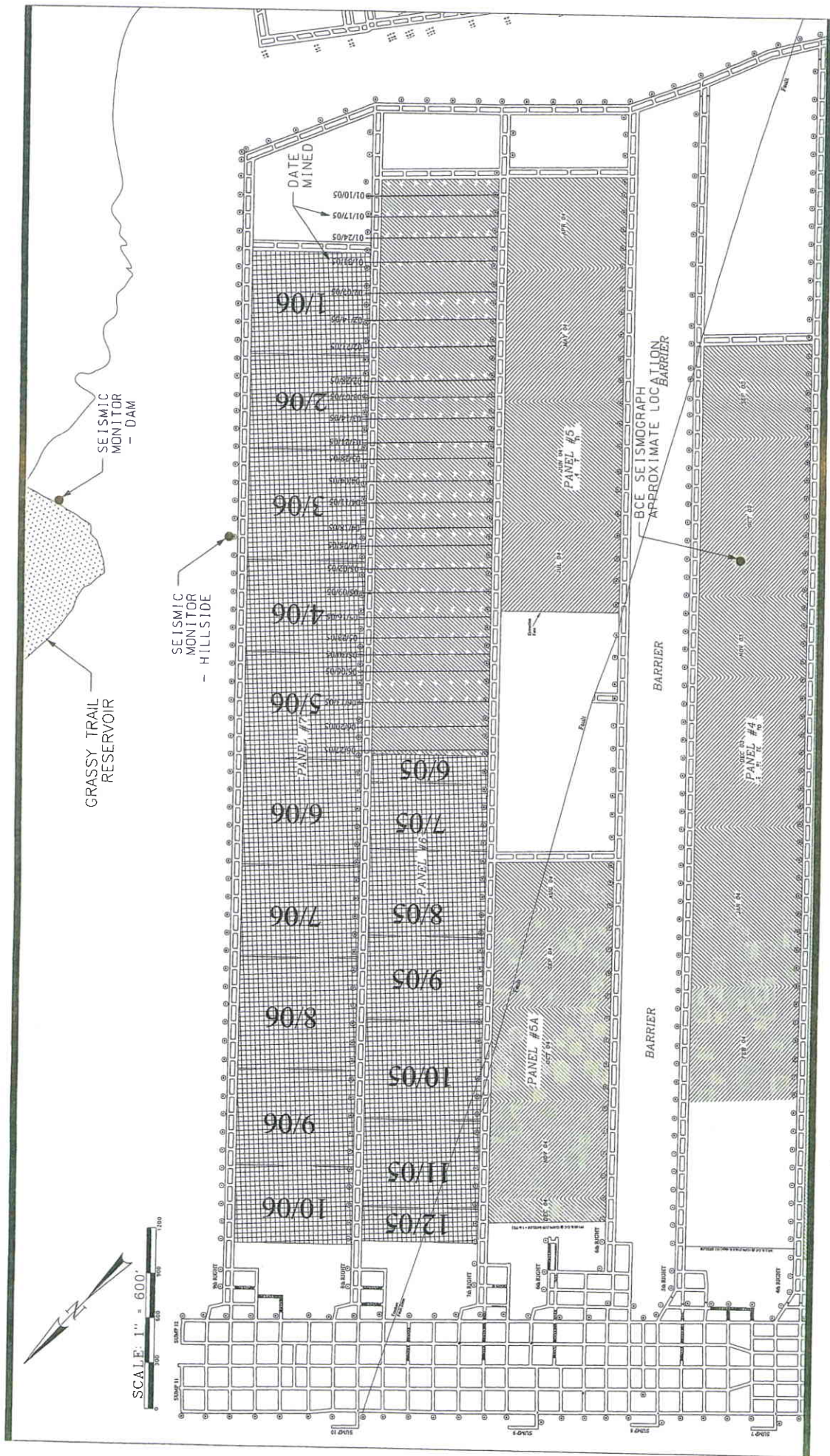
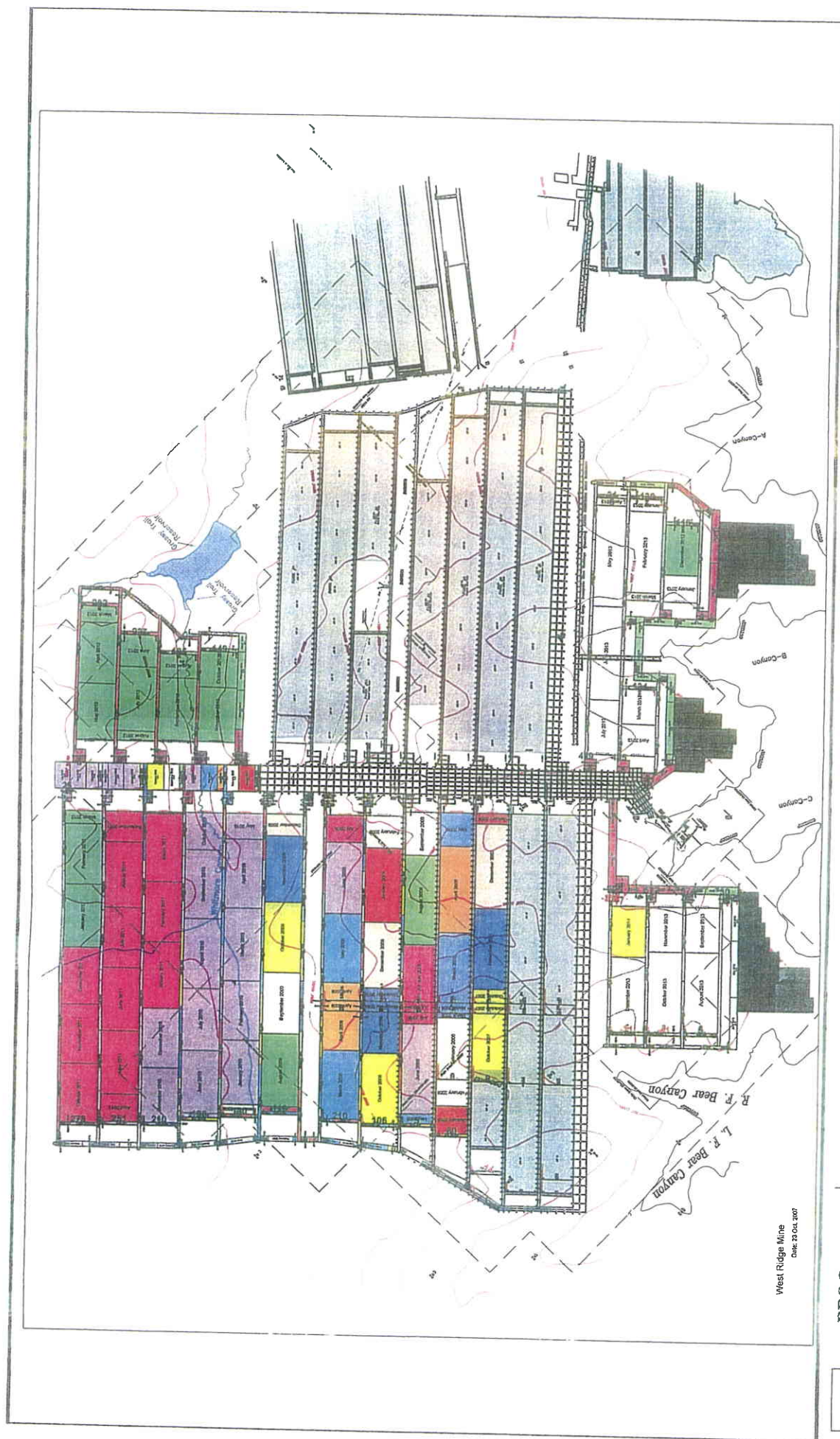


Figure 3

PROJECTED DATES OF MINING
(AS OF JUNE 2005)

GRASSY TRAIL DAM
CARBON COUNTY, UTAH



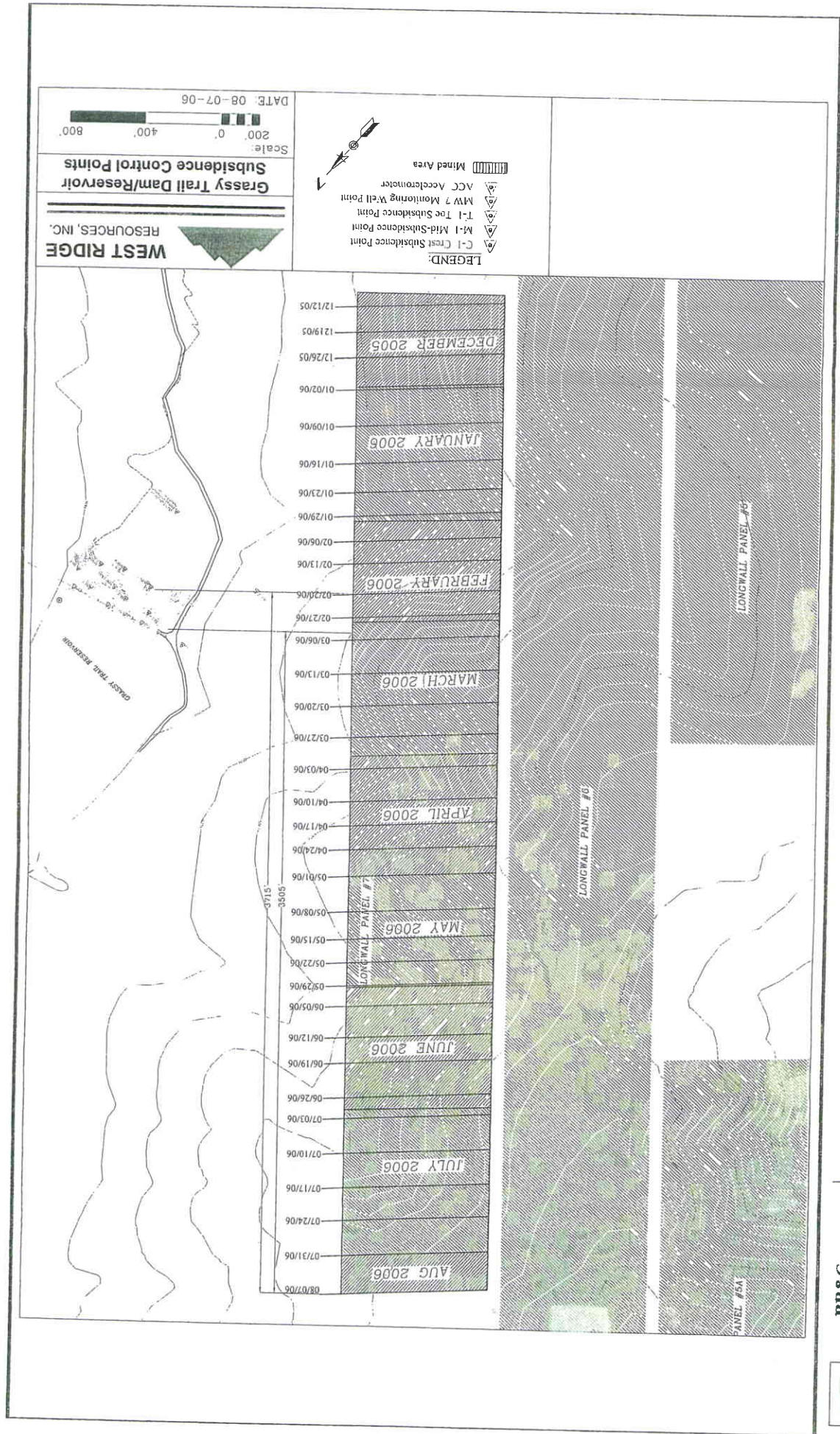


Figure 5
ACTUAL DATES OF MINING IN PANEL 7
(THROUGH AUGUST 7, 2006)

GRASSY TRAIL DAM
CARBON COUNTY, UTAH

Appendix A

Table A-1
Monthly Summary of Ground Motions

Month	Device on Dam				Device on Hillside				UUSS Earthquakes	
	No. of Events	Max Per Day	Max PPV (mm/s)	Max Accel. (g)	No. of Events	Max Per Day	Max PPV (mm/s)	Max Accel. (g)	No. of Events	Max Magnitude
Jan 2005	0	---	---	---	5	3	1.10	0.015	0	---
Feb 2005	0	---	---	---	30	5	1.49	0.018	4	1.7
Mar 2005	1	1	1.25	0.007	61	6	2.17	0.020	1	1.7
Apr 2005	10	2	1.25	0.012	84	7	1.61	0.020	5	1.8
May 2005	10	2	1.47	0.010	124	14	3.10	0.025	2	2.0
Jun 2005	4	2	2.00	0.010	72	7	3.87	0.032	5	1.6
Jul 2005	0	---	---	---	20	5	1.20	0.018	2	1.6
Aug 2005	28	3	3.26	0.028	56	5	4.75	0.027	30	1.9
Sep 2005	43	4	3.44	0.018	72	5	4.92	0.027	36	1.9
Oct 2005	3	1	1.71	0.017	13	3	1.48	0.018	4	1.6
Nov 2005	0	---	---	---	n/a	removed for re-calibration			8	1.6
Dec 2005	2	1	0.083	0.018	n/a	device moved to new location			2	1.7
Jan 2006	20	3	1.90	0.015	20	3	2.16	0.015	4	1.7
Feb 2006	71	11	5.84	0.058	81	11	9.75	0.091	10	2.2
Mar 2006	183	13	30.4 *	0.268	223	13	33.1 *	0.348	44	2.6
Apr 2006	228	15	20.7	0.182	235	14	17.5	0.159	69	2.1
May 2006	130	12	13.3	0.113	165	12	14.8	0.108	46	2.4
Jun 2006	90	8	8.80	0.075	118	9	7.30	0.099	61	2.0
Jul 2006	93	8	5.59	0.048	98	7	4.40	0.035	77	2.1
Aug 2006	72	6	2.15	0.020	64	6	2.15	0.018	110	1.9
Sep 2006	16	2	2.05	0.018	17	3	1.19	0.083	44	1.9
Oct 2006	0	---	---	---	0	---	---	---	0	---
Nov 2006	0	---	---	---	1	1	0.752	0.010	0	---
Dec 2006	0	---	---	---	0	---	---	---	1	1.3
Jan 2007	0	---	---	---	0	---	---	---	2	1.6
Feb 2007	0	---	---	---	0	---	---	---	1	1.5
Mar 2007	0	---	---	---	0	---	---	---	40	2.0
Apr 2007	0	---	---	---	0	---	---	---	17	1.6
May 2007	0	---	---	---	1	1	2.50	0.020	41	1.9
Jun 2007	n/a	errors			1	1	1.05	0.010	61	2.0
Jul 2007	n/a	removed for re-calibration			1	1	0.902	0.008	47	2.3
Aug 2007	n/a	---	---	---	1	1	0.074	0.010	23	1.6
Sep 2007	n/a	---	---	---	0	---	---	---	1	1.7
Oct 2007	n/a	---	---	---	0	---	---	---	24	1.8
Nov 2007	0	---	---	---	n/a	removed for re-calibration			45	2.1
Dec 2007	0	---	---	---	n/a	---	---	---	59	2.1
Jan 2008	7	1	2.98	0.027	n/a	removed for repair			35	2.4

Notes: Max. PPV = Maximum Peak Vector Sum Particle Velocity Recorded During the Month
Max. Accel. = Maximum Peak Acceleration Recorded During the Month
* PPV value greater than range limit (31.7mm/s). Value shown may be lower than actual PPV

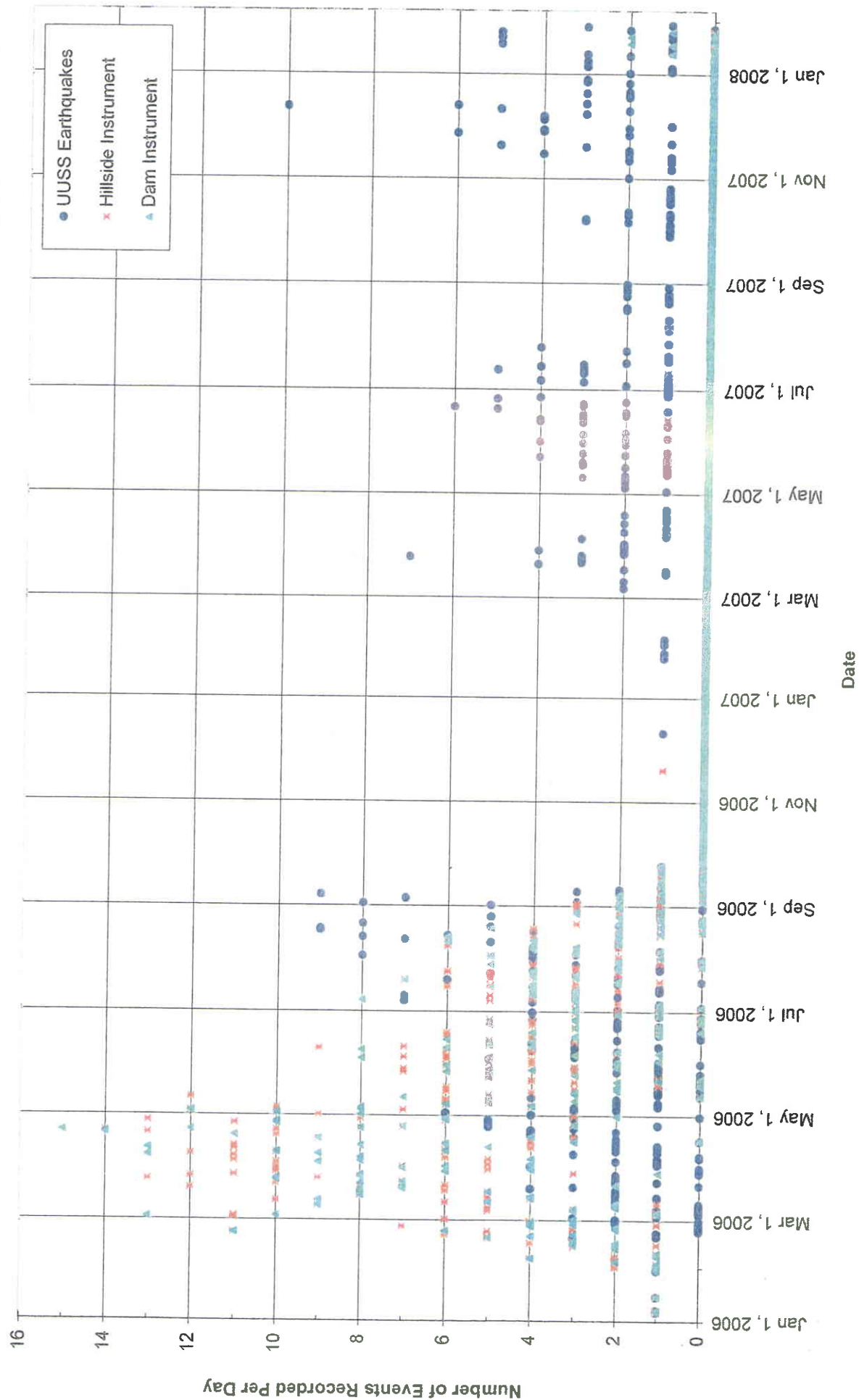


FIGURE A-1

NUMBER OF EVENTS RECORDED PER DAY (SINCE JAN 1, 2006)
GRASSY TRAIL DAM - CARBON COUNTY, UTAH

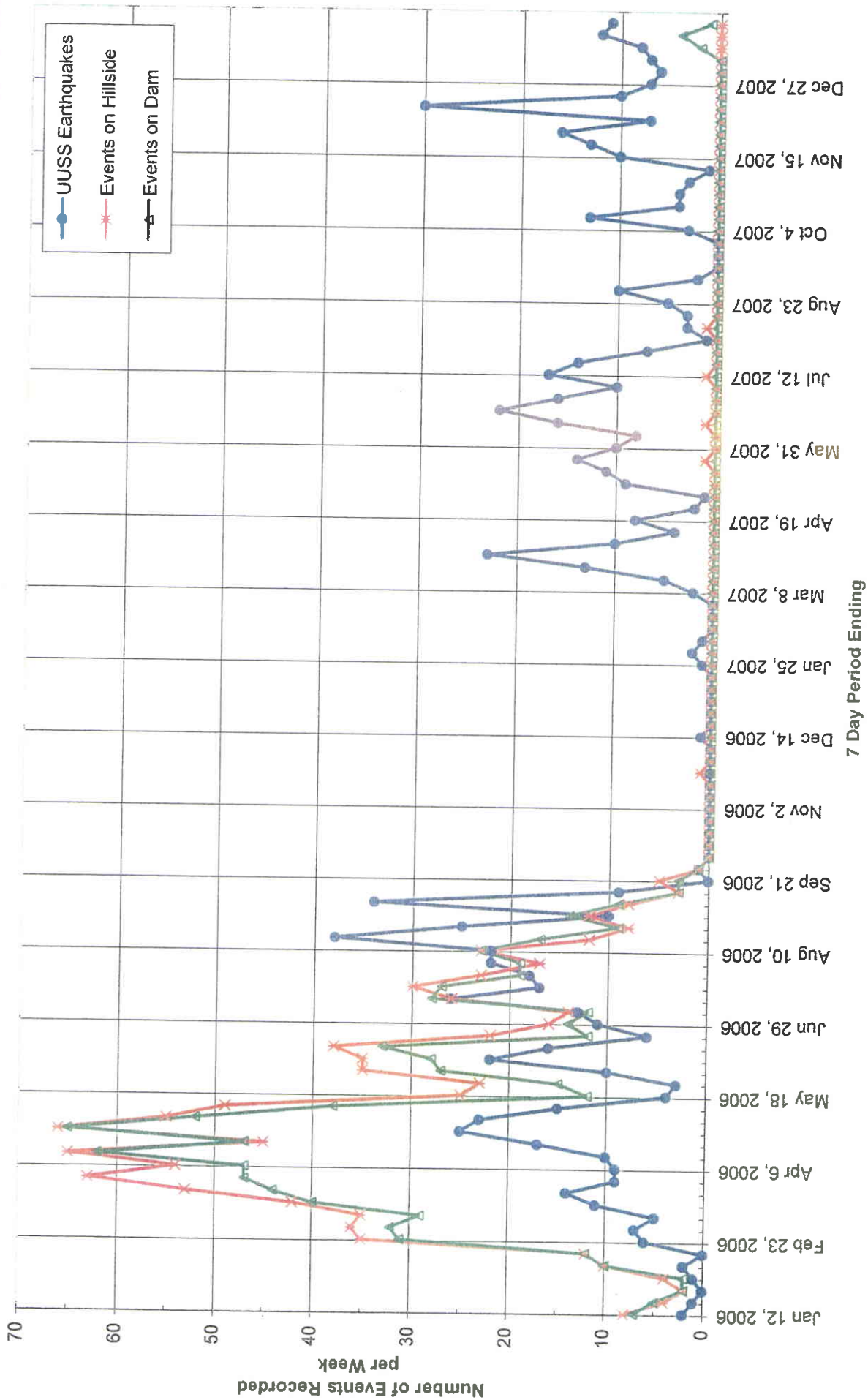


FIGURE A-2

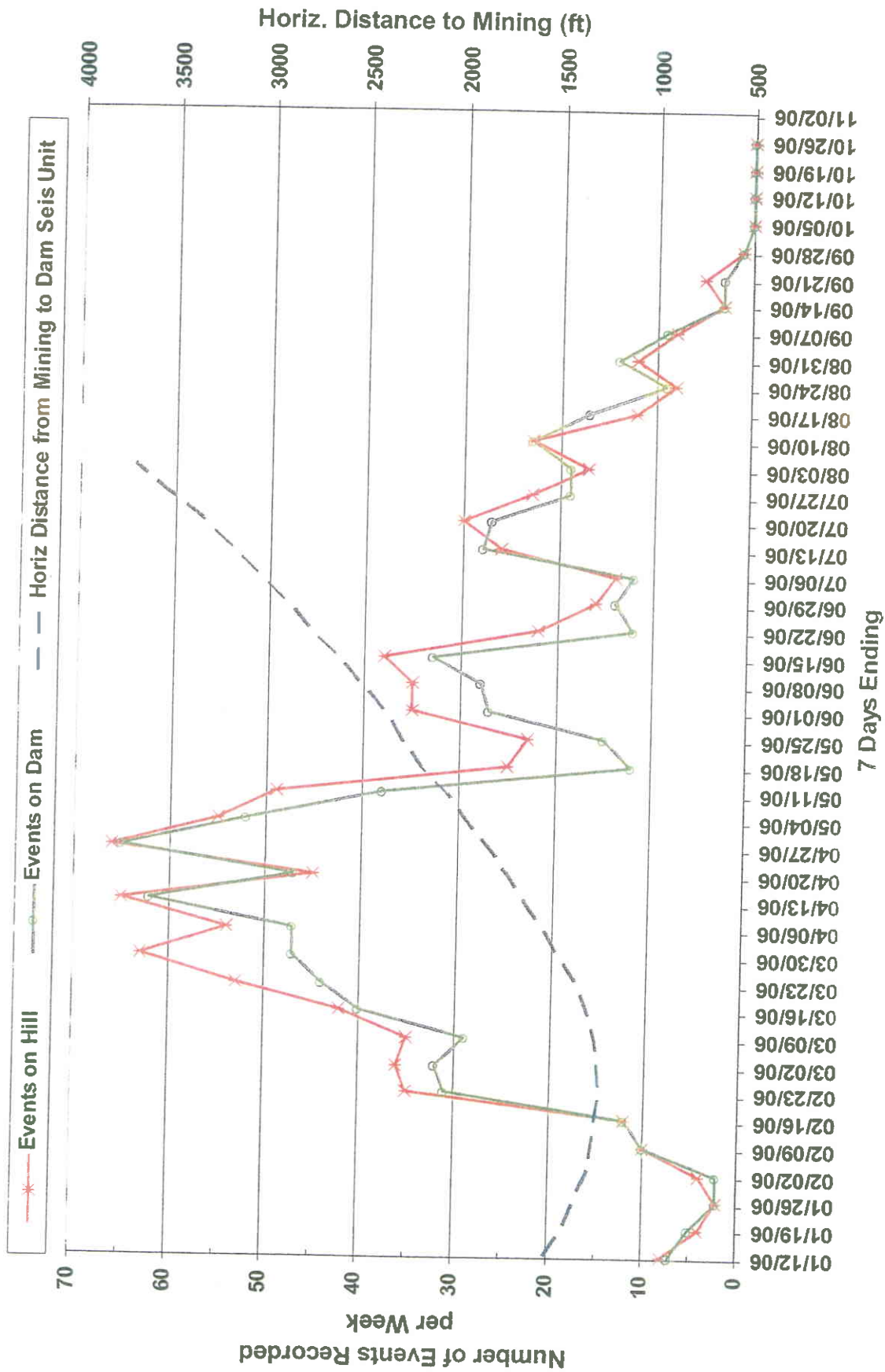
NUMBER OF EVENTS RECORDED PER WEEK
GRASSY TRAIL DAM - CARBON COUNTY, UTAH

**RB&G
ENGINEERING
INC.**

PROVO, UTAH



Seismic Events per Seven day Period



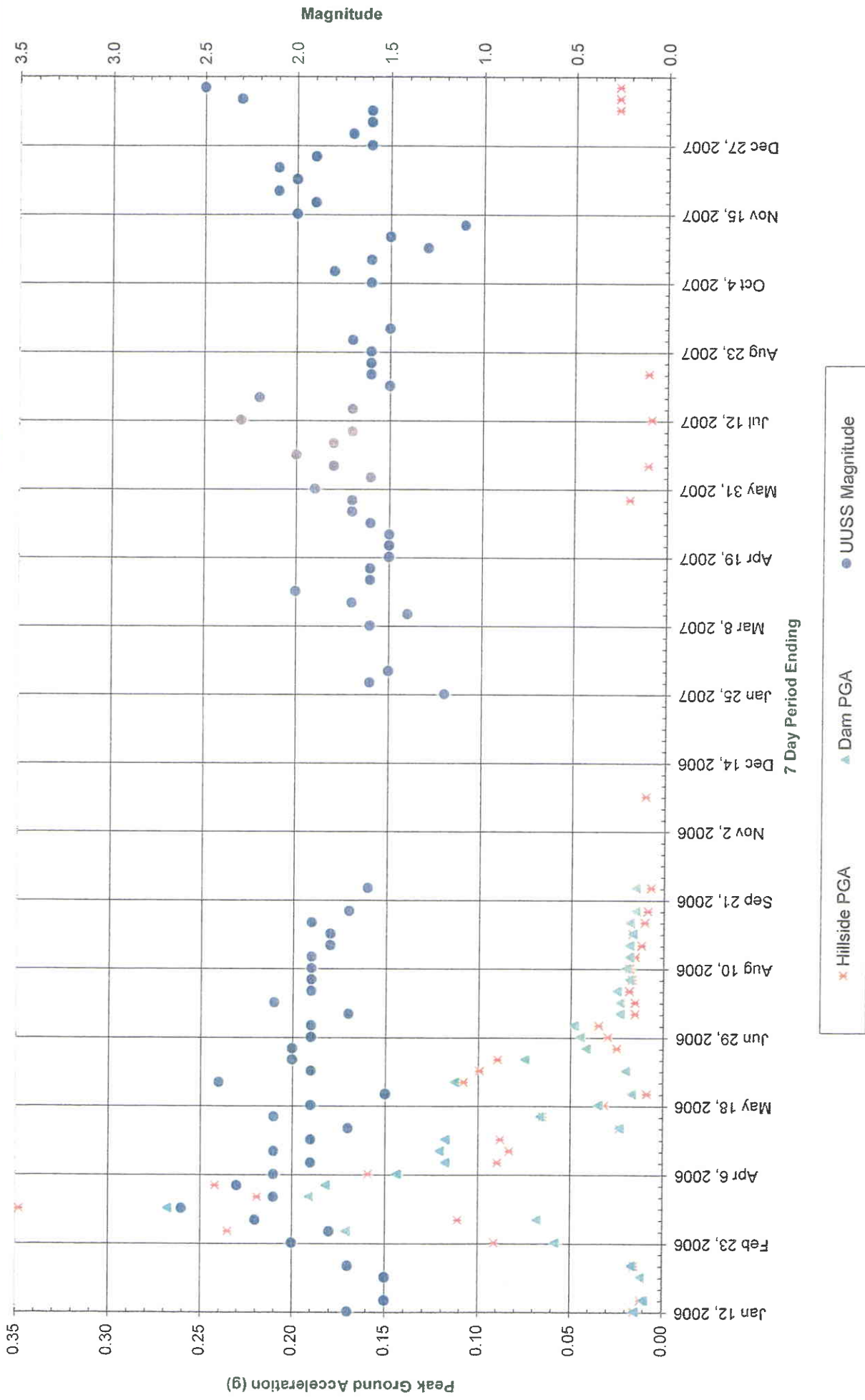


**RB&G
ENGINEERING
INC.**

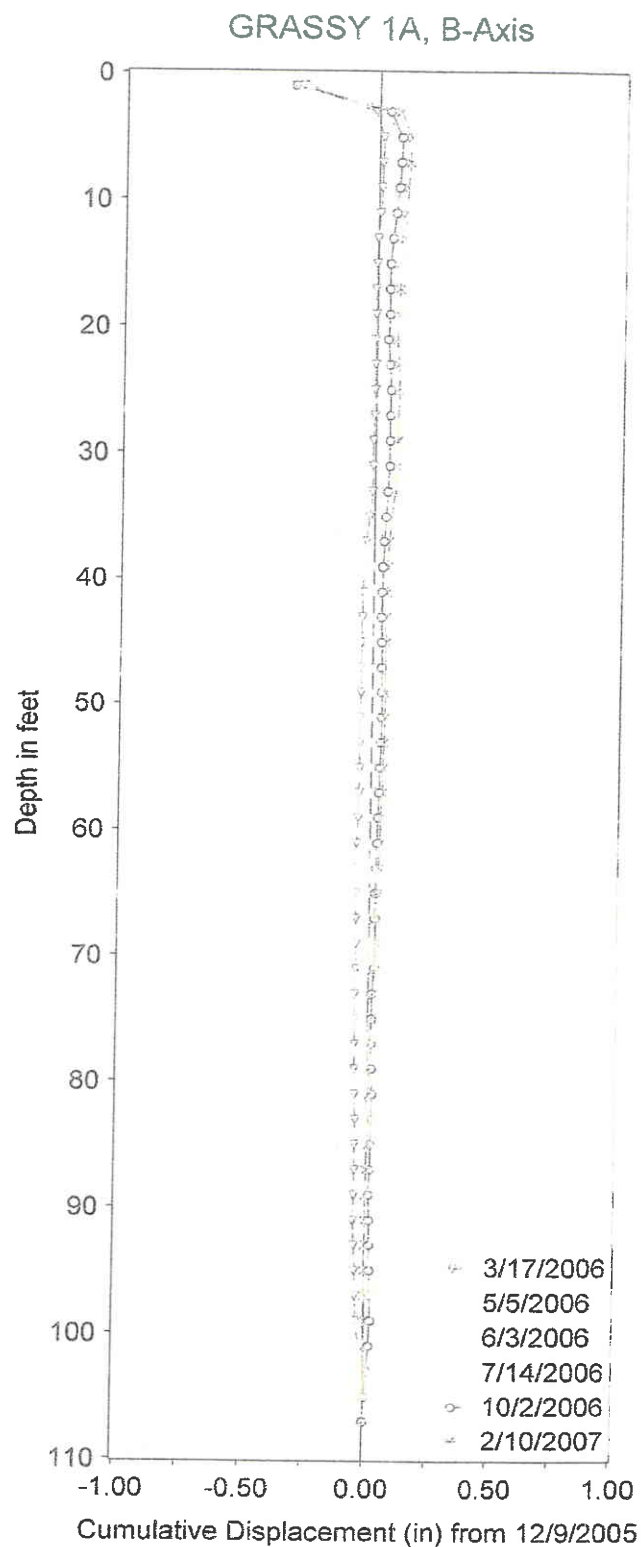
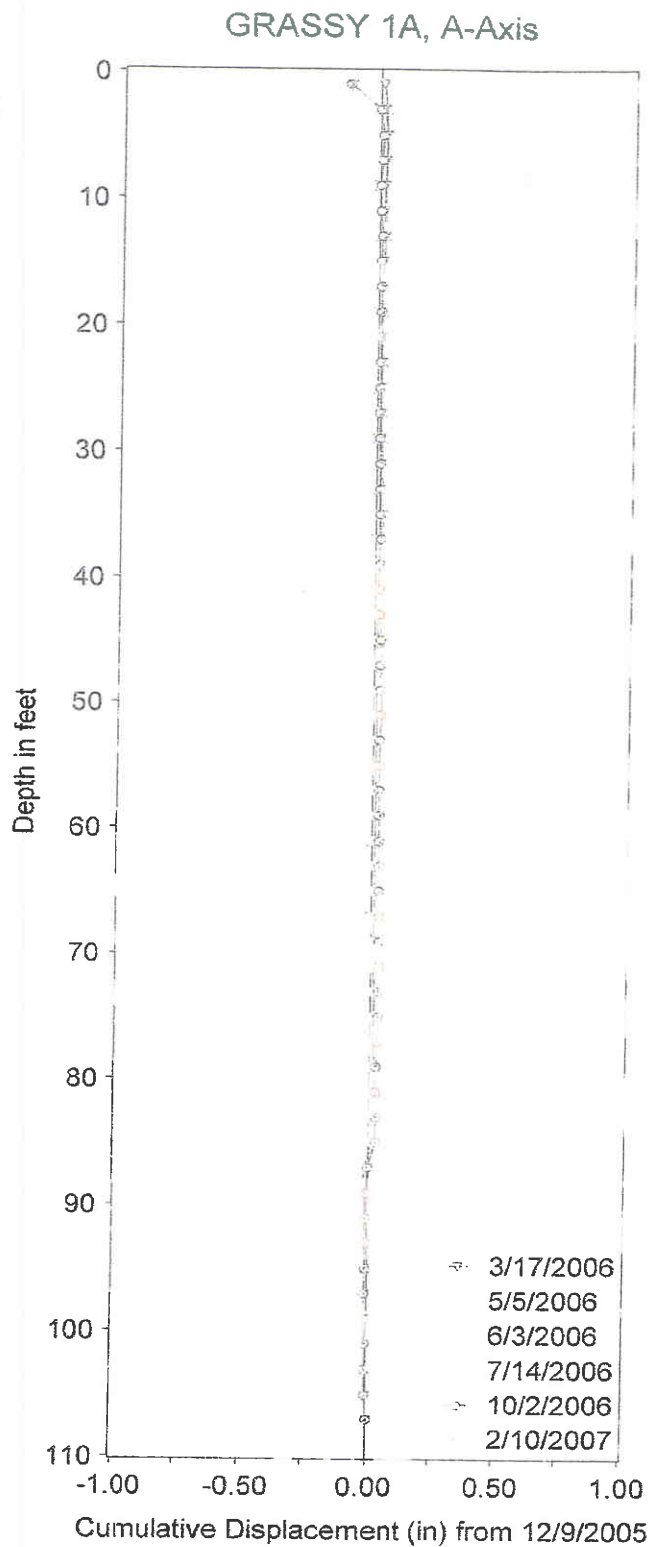
PROVO, UTAH

FIGURE A-4

**PEAK GROUND ACCELERATIONS AND EVENT MAGNITUDES VERSUS TIME
GRASSY TRAIL DAM - CARBON COUNTY, UTAH**



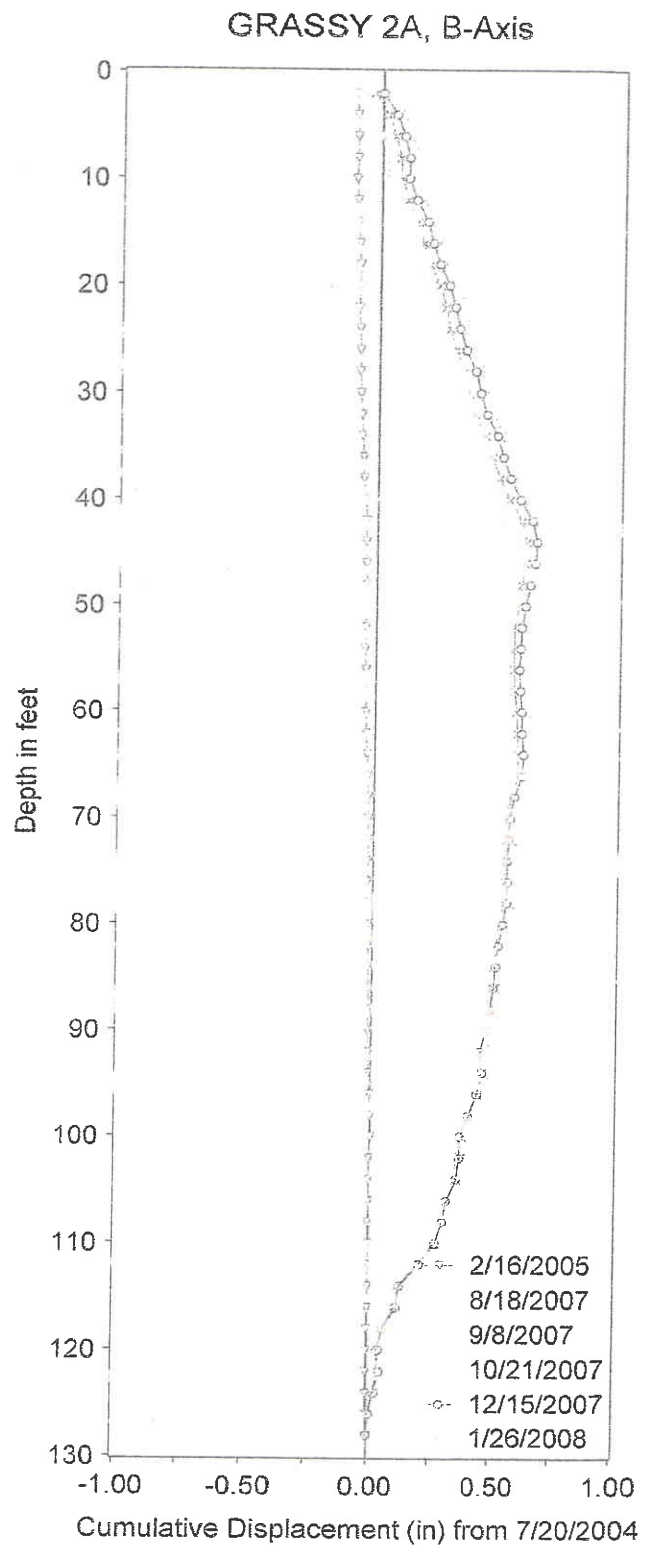
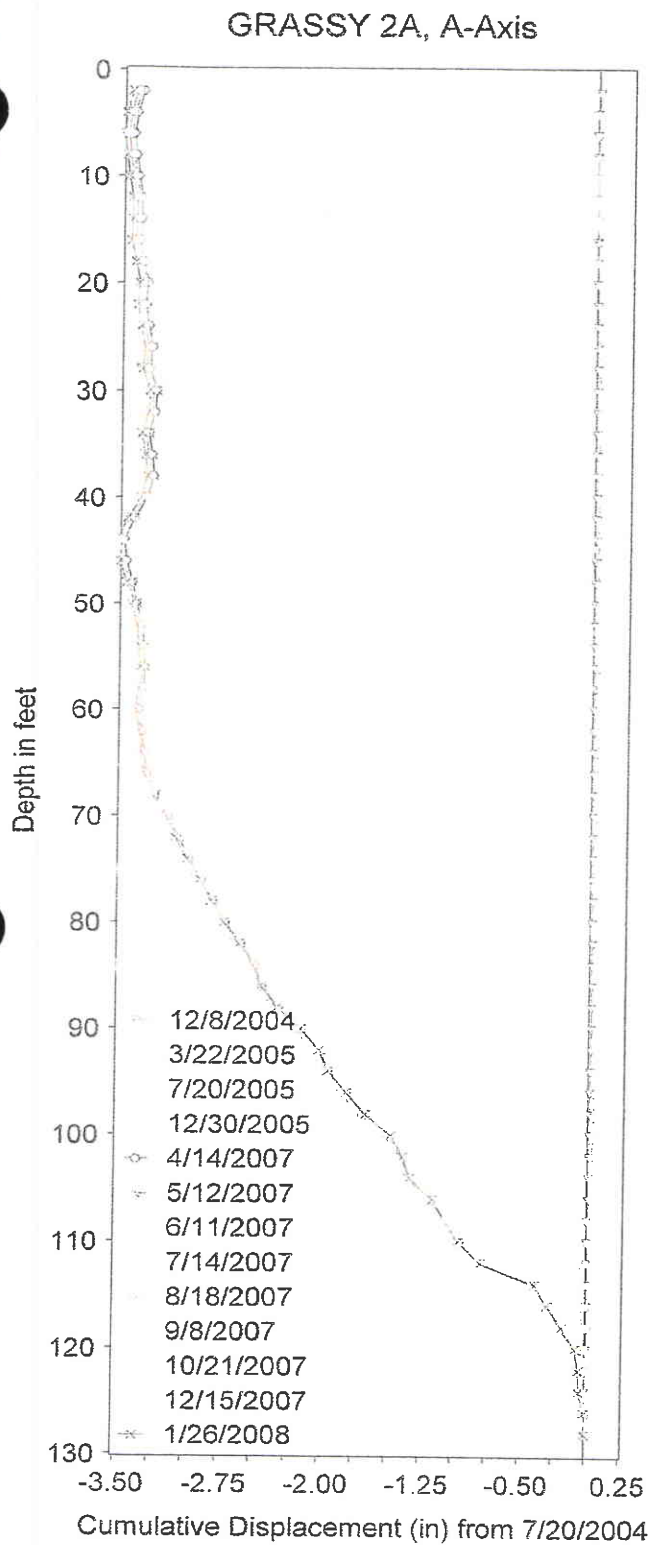
Appendix B



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FIGURE B-1

INCLINOMETER 1 - DEFLECTION PROFILES
GRASSY TRAIL DAM AND RESERVOIR - CARBON COUNTY, UTAH



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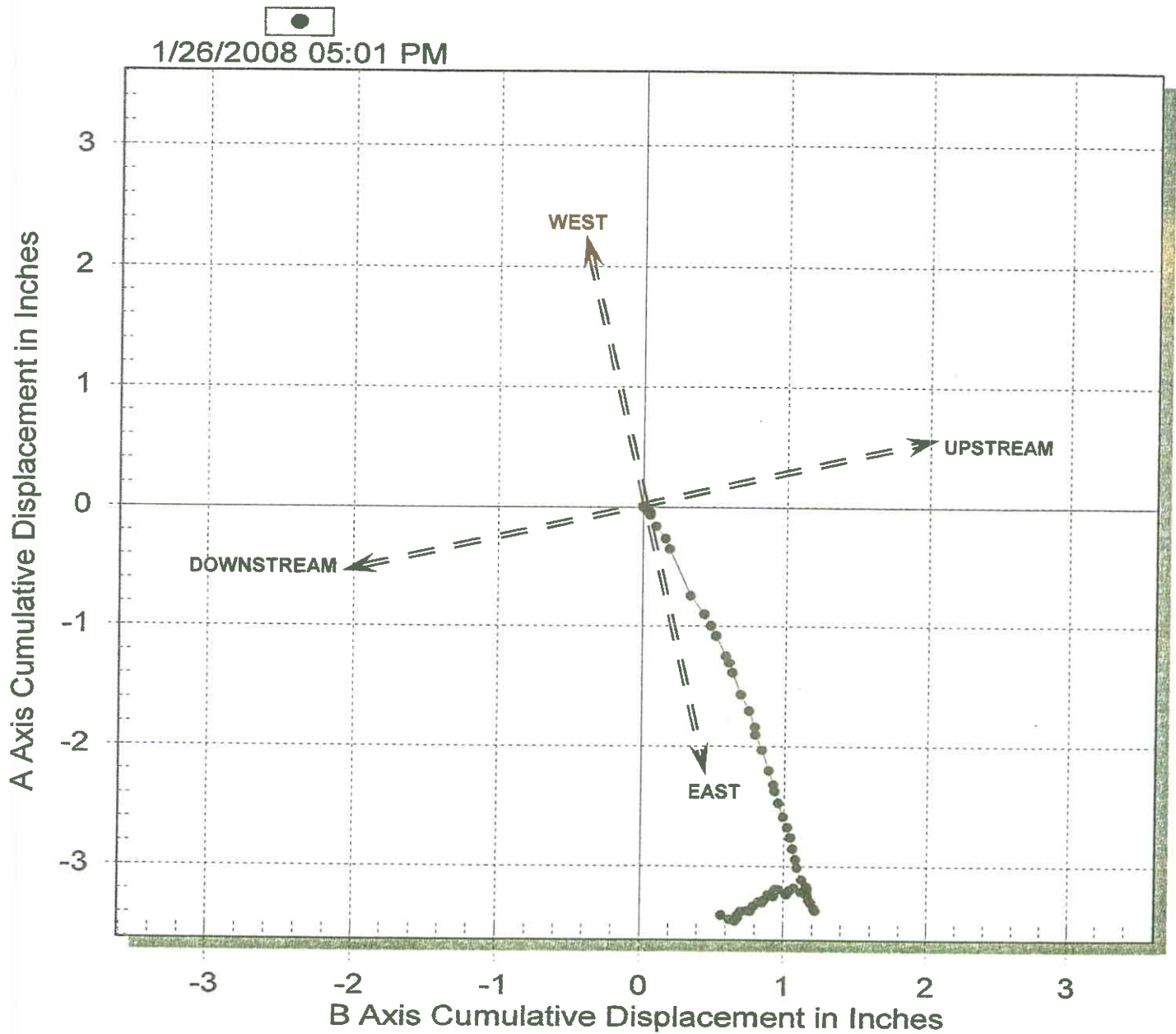
FIGURE B-2

INCLINOMETER 2 - DEFLECTION PROFILES

GRASSY TRAIL DAM AND RESERVOIR - CARBON COUNTY, UTAH

GRASSY:2A - A Axis vs B Axis

Initial survey: 7/20/2004 09:33 AM



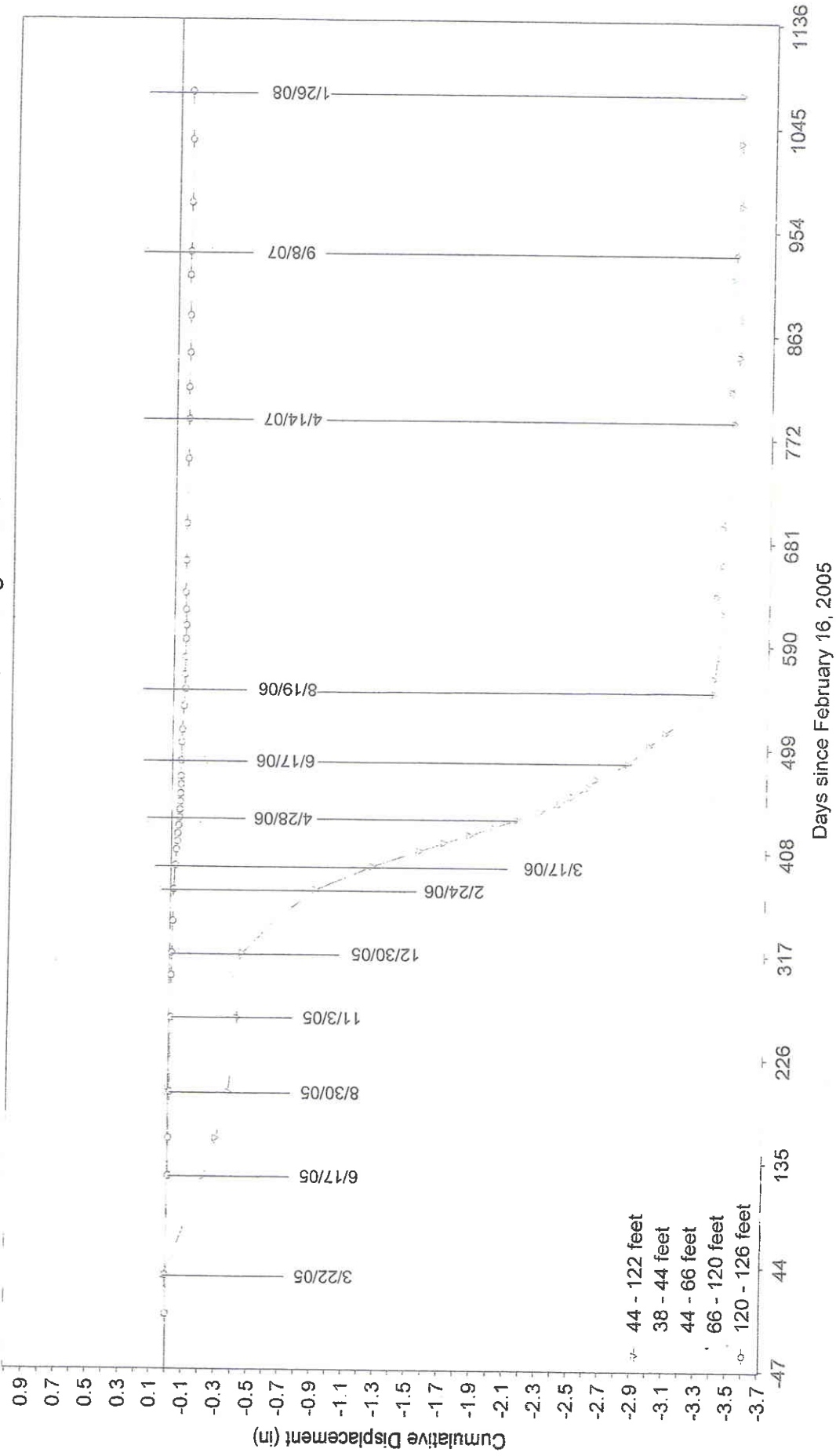
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FIGURE B-3

INCLINOMETER 2 - PLAN VIEW OF DEFLECTIONS
GRASSY TRAIL DAM AND RESERVOIR - CARBON COUNTY, UTAH

GRASSY 2A, A-Axis, -10 degree skew



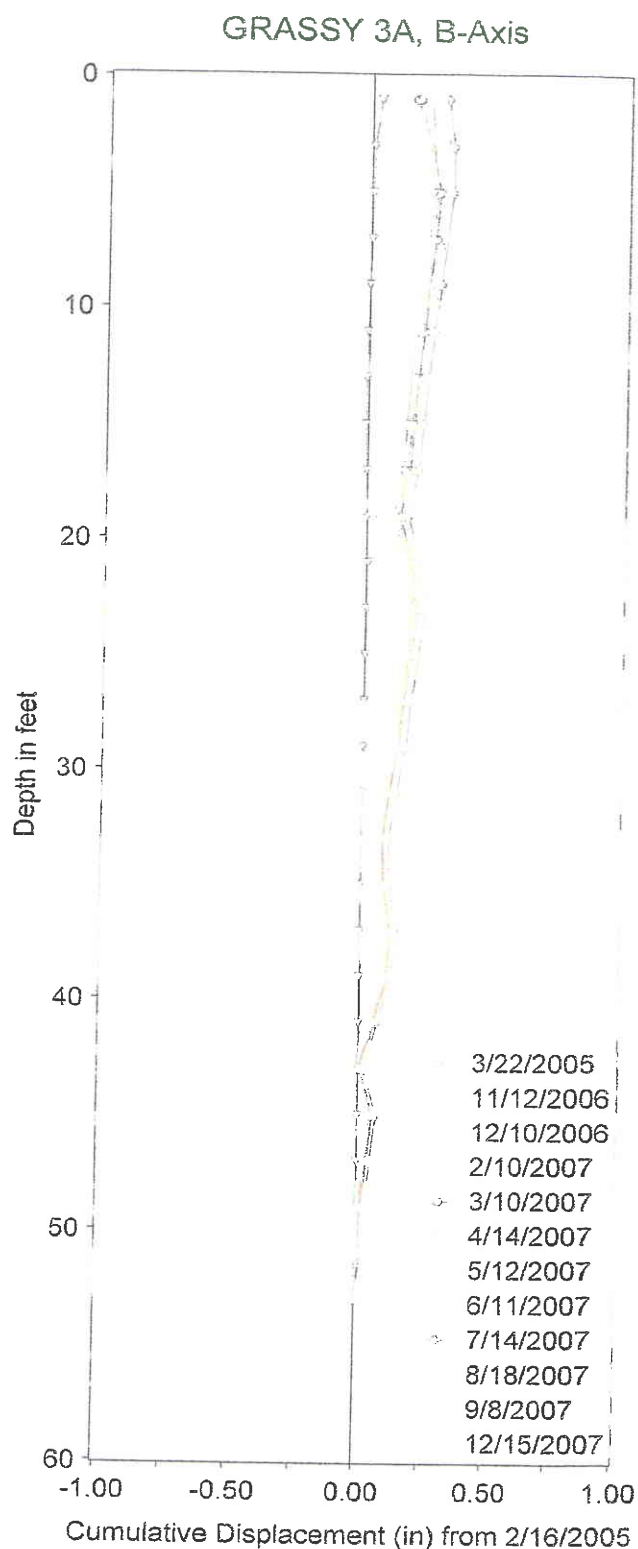
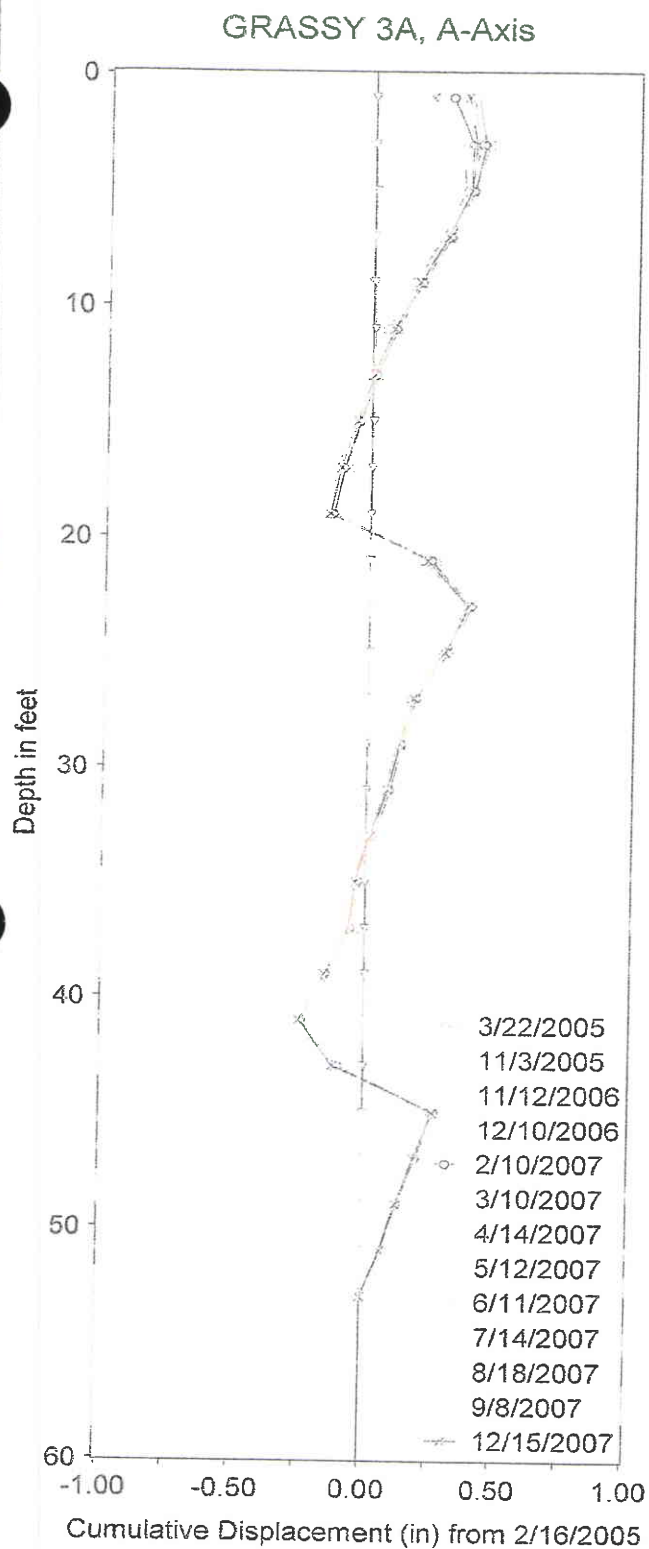
Inclinometer 1-2 Located on Dam 1/26/08

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FIGURE B-4

INCLINOMETER 2 - DEFLECTIONS VERSUS TIME
GRASSY TRAIL DAM - CARBON COUNTY, UTAH



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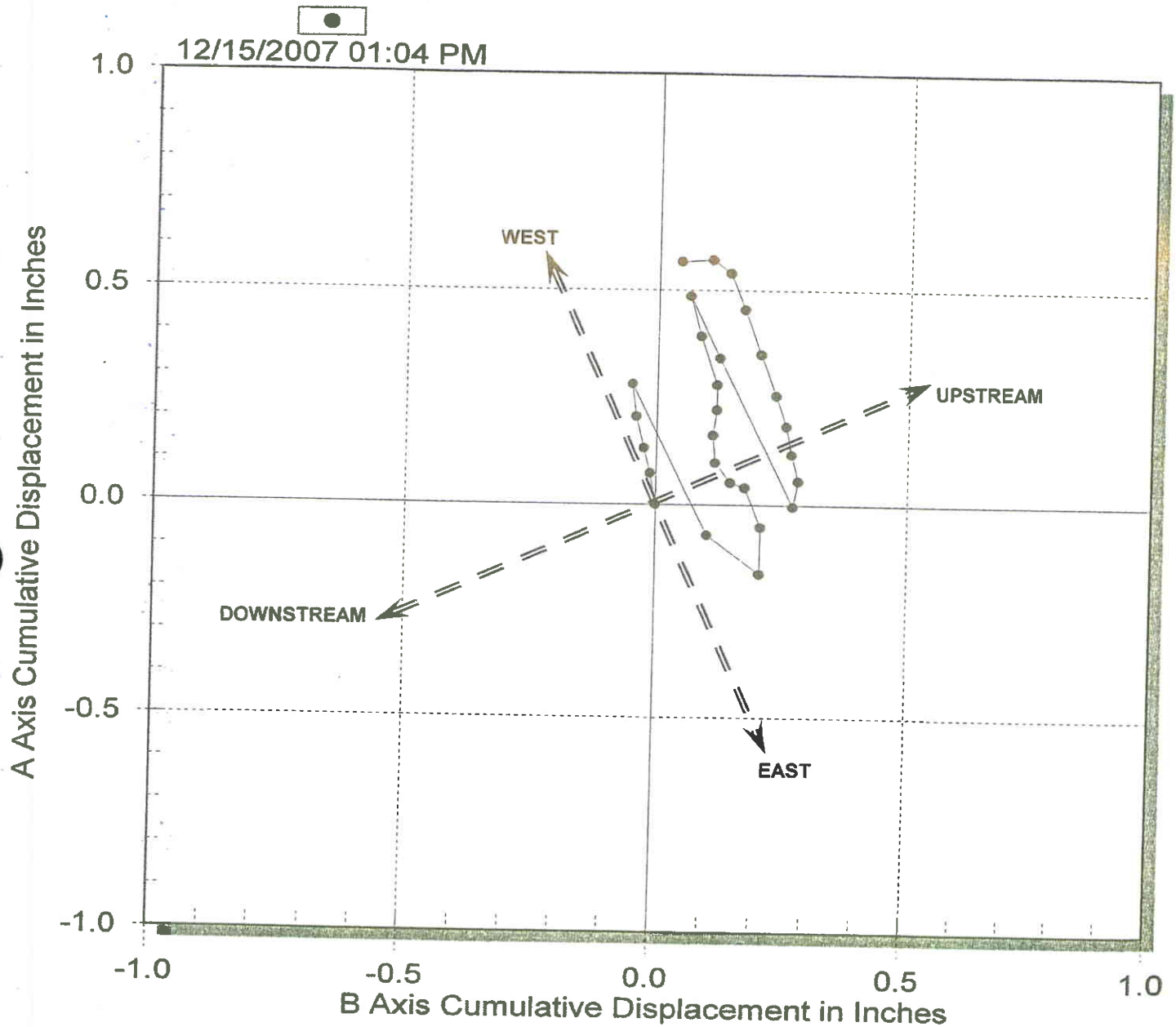
FIGURE B-5

INCLINOMETER 3 - DEFLECTION PROFILES

GRASSY TRAIL DAM AND RESERVOIR - CARBON COUNTY, UTAH

GRASSY:3A - A Axis vs B Axis

Initial survey: 7/20/2004 09:03 AM



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FIGURE B-6

INCLINOMETER 3 - PLAN VIEW OF DEFLECTIONS
GRASSY TRAIL DAM AND RESERVOIR - CARBON COUNTY, UTAH

GRASSY 3A, A-Axis

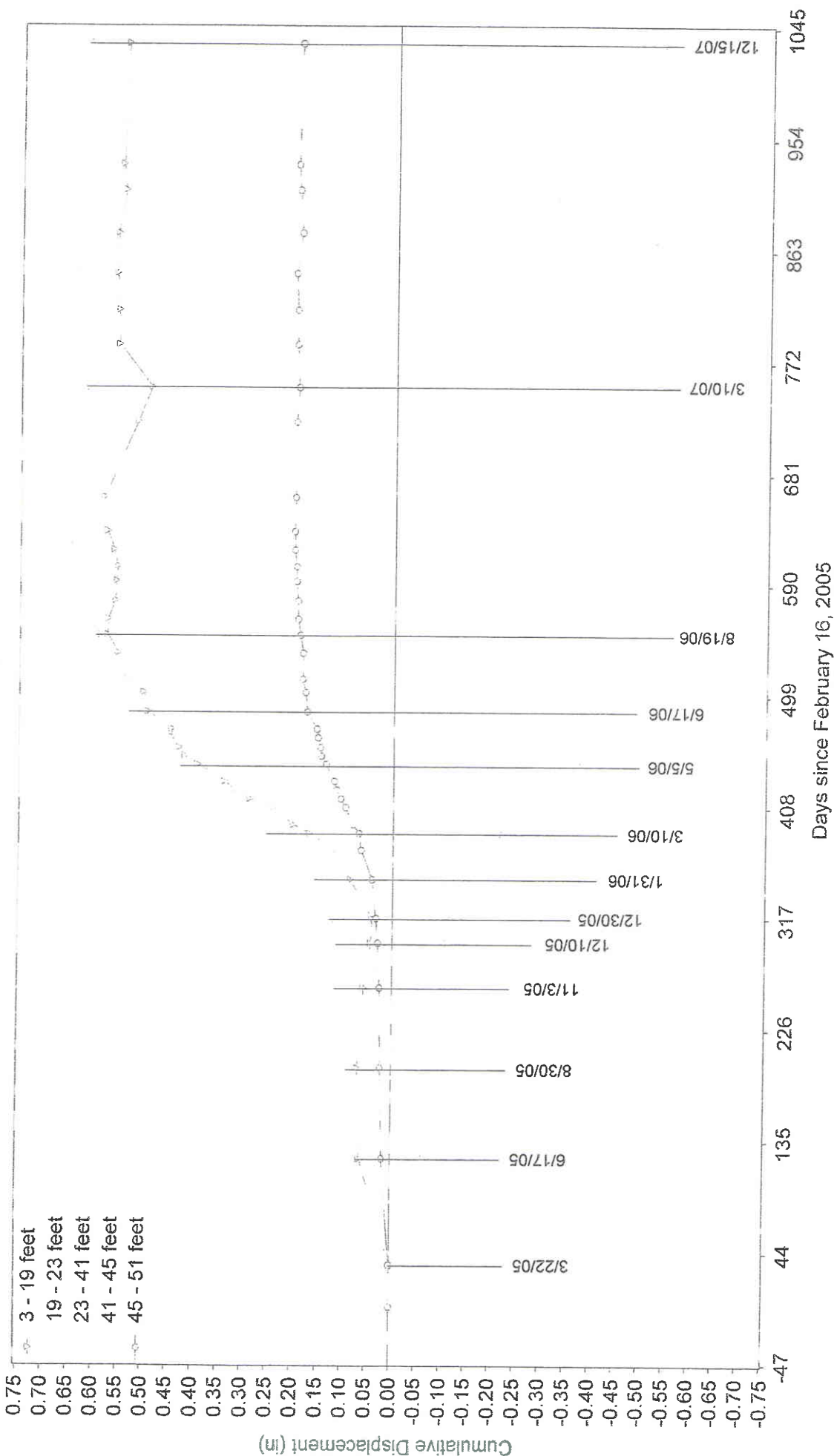
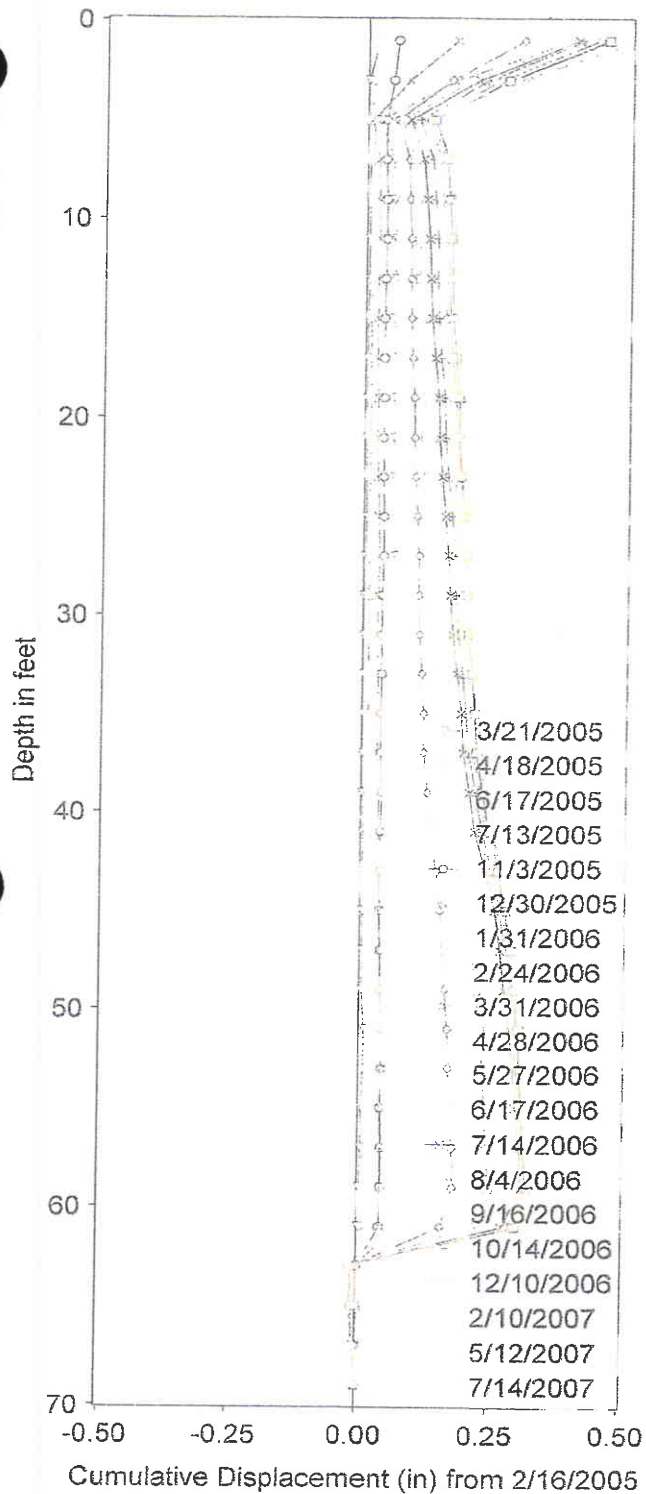
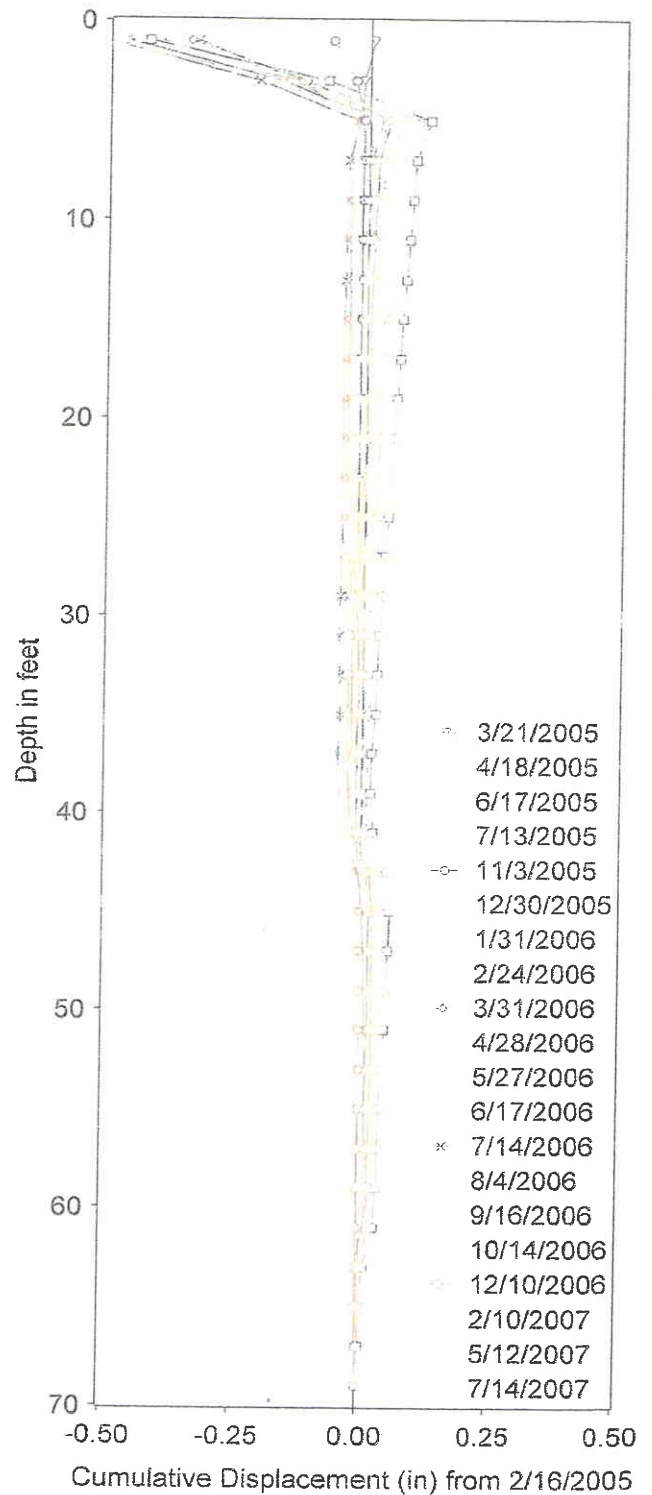


FIGURE B-7
INCLINOMETER 3 - DEFLECTIONS VERSUS TIME
 GRASSY TRAIL DAM - CARBON COUNTY, UTAH

Grassy 4, A-Axis



Grassy 4, B-Axis



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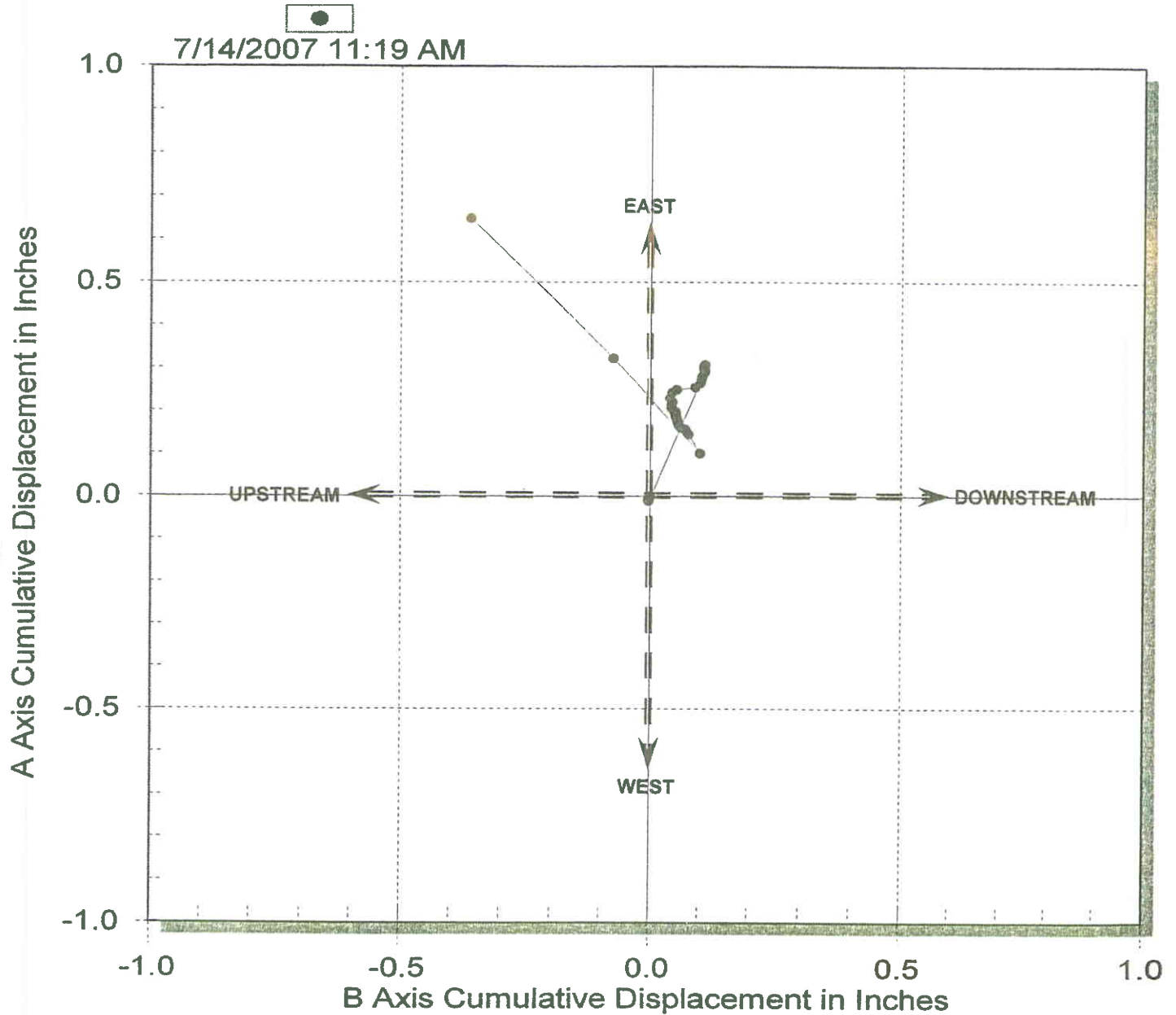
FIGURE B-8

INCLINOMETER 4 - DEFLECTION PROFILES

GRASSY TRAIL DAM AND RESERVOIR - CARBON COUNTY, UTAH

Grassy:4 - A Axis vs B Axis

Initial survey: 2/16/2005 05:37 PM



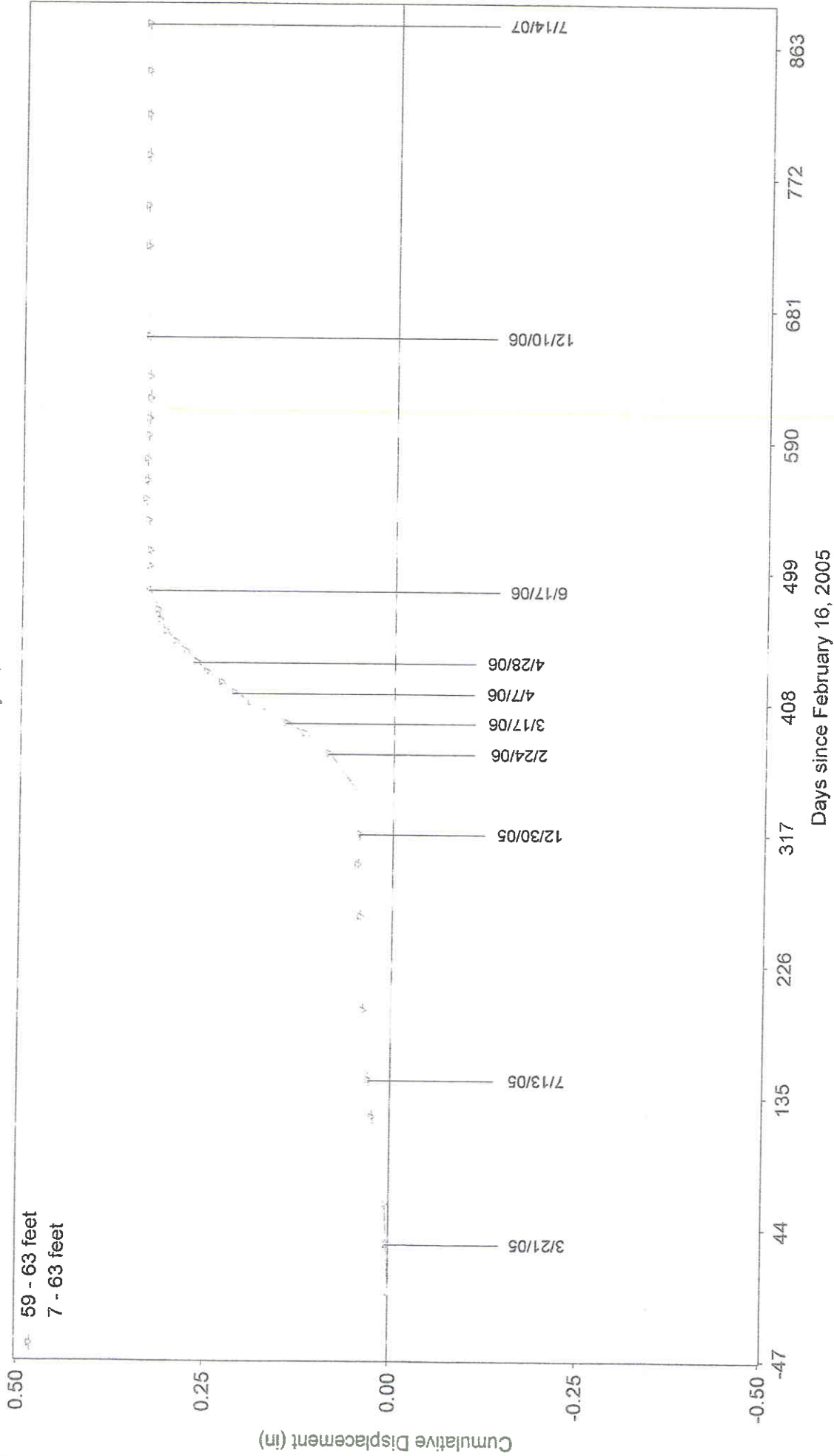
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FIGURE B-9

INCLINOMETER 4 - PLAN VIEW OF DEFLECTIONS
GRASSY TRAIL DAM AND RESERVOIR - CARBON COUNTY, UTAH

Grassy 4, A-Axis



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FIGURE B-10

**INCLINOMETER 4 - DEFLECTIONS VERSUS TIME
GRASSY TRAIL DAM - CARBON COUNTY, UTAH**

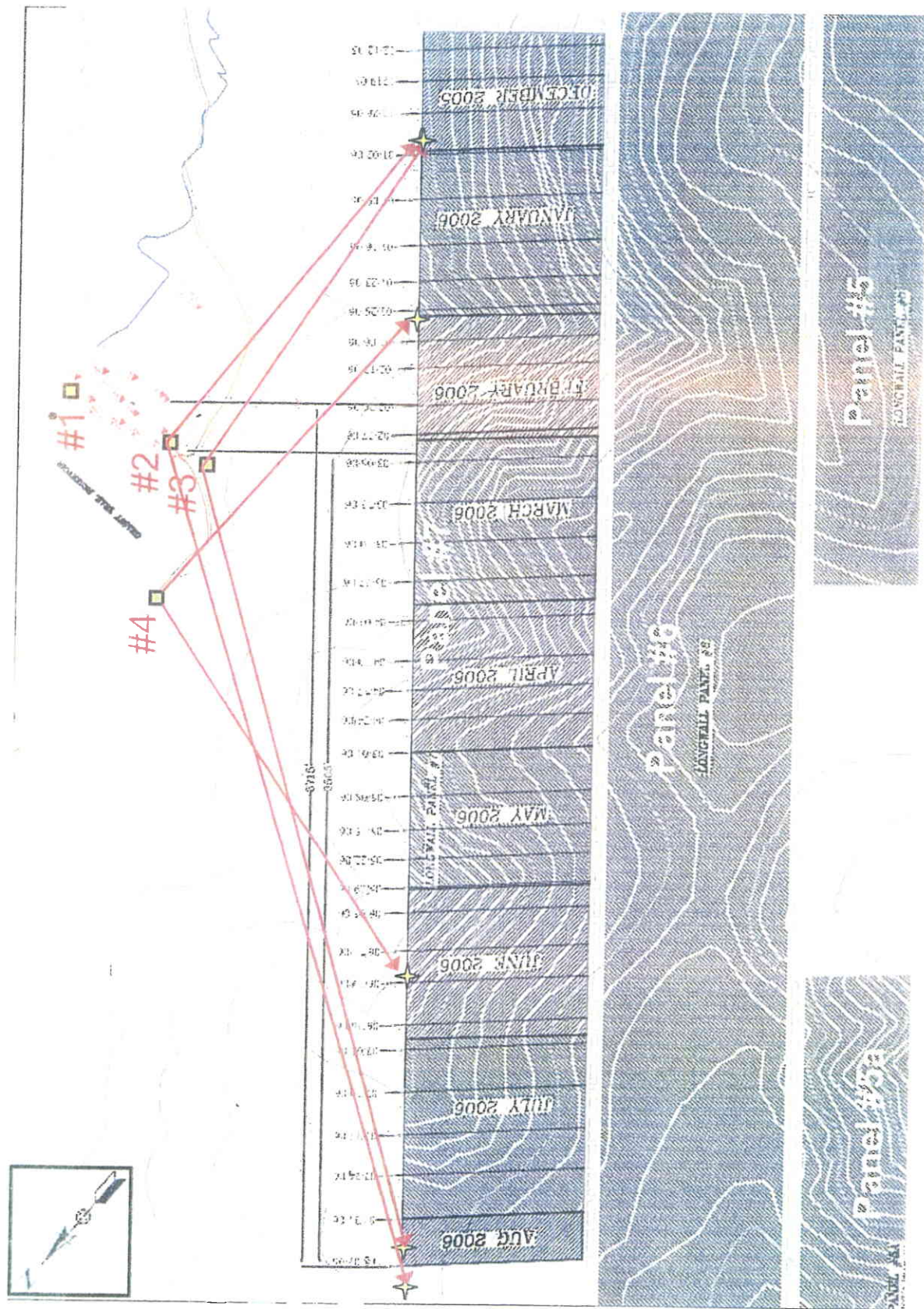


FIGURE B-11
APPROXIMATE ZONES OF SIGNIFICANT MINING-INDUCED DEFLECTION
GRASSY TRAIL DAM - CARBON COUNTY, UTAH



Appendix C

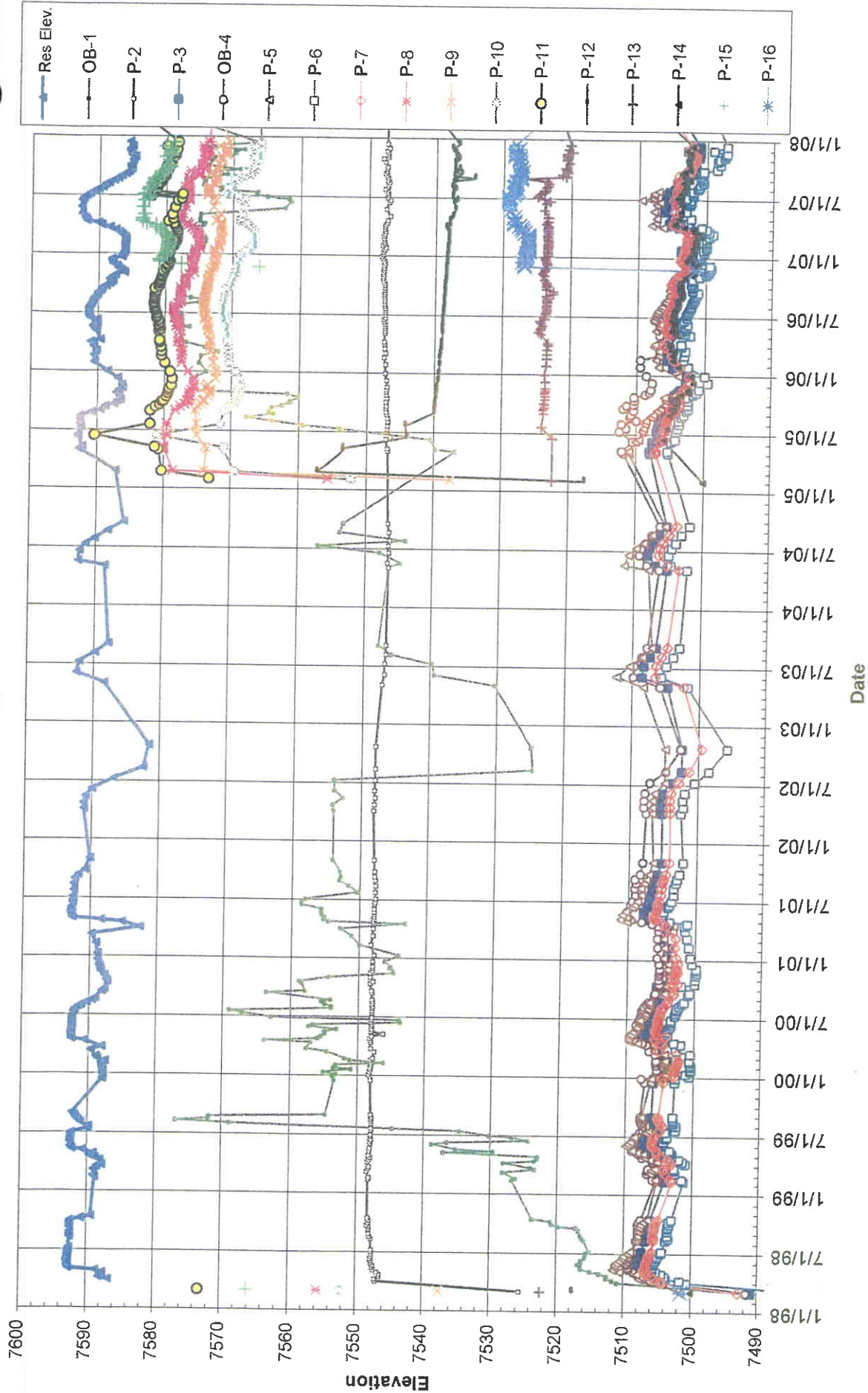


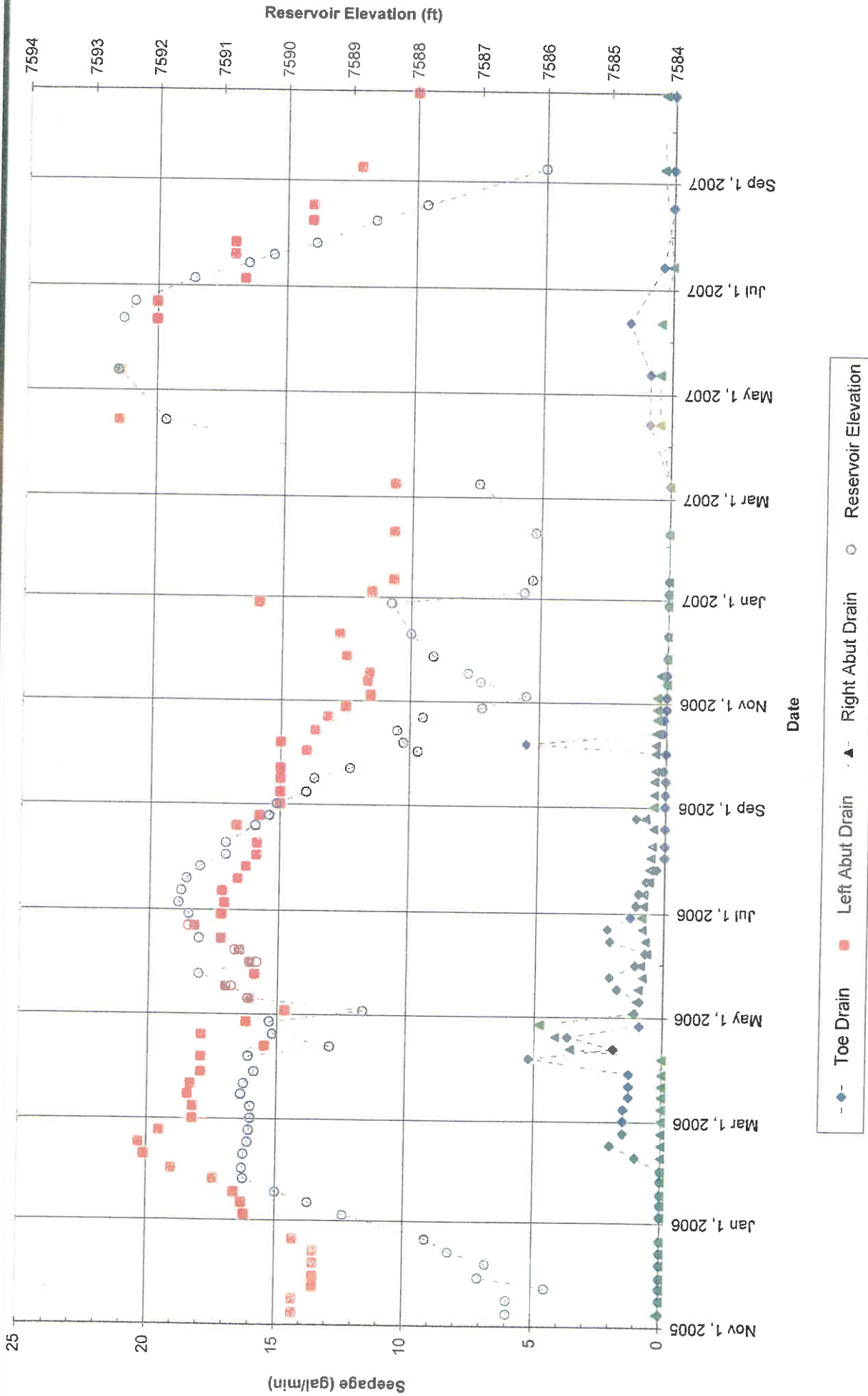
FIGURE C-1

WATER LEVELS VERSUS TIME

GRASSY TRAIL DAM - CARBON COUNTY, UTAH

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Provo, Utah





Appendix D

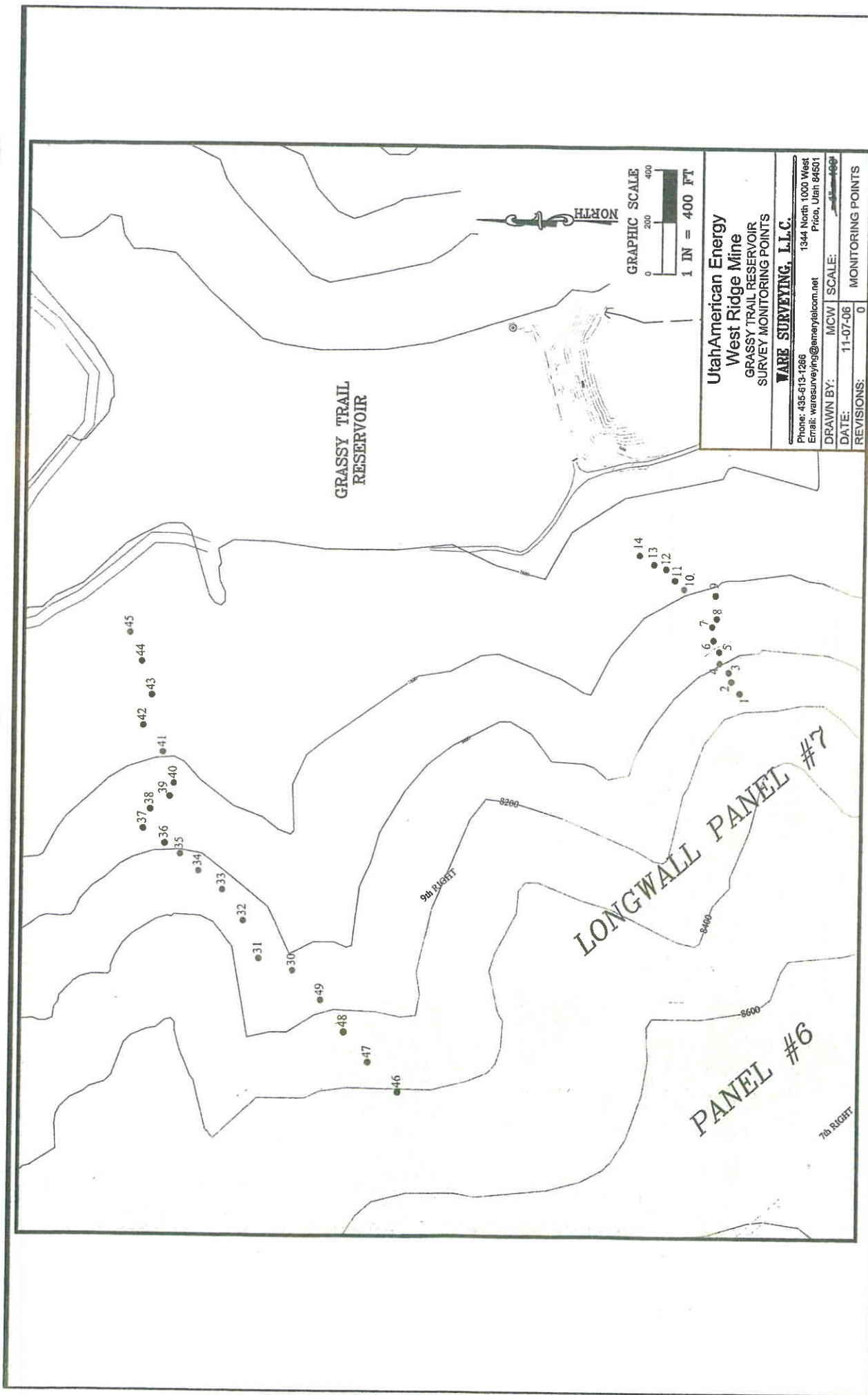


FIGURE D-1

HILLSIDE SURVEY POINT LOCATIONS
 GRASSY TRAIL DAM - CARBON COUNTY, UTAH

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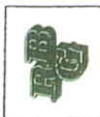


TABLE D-1 SURVEYED COORDINATES OF HILLSIDE SURVEY POINTS

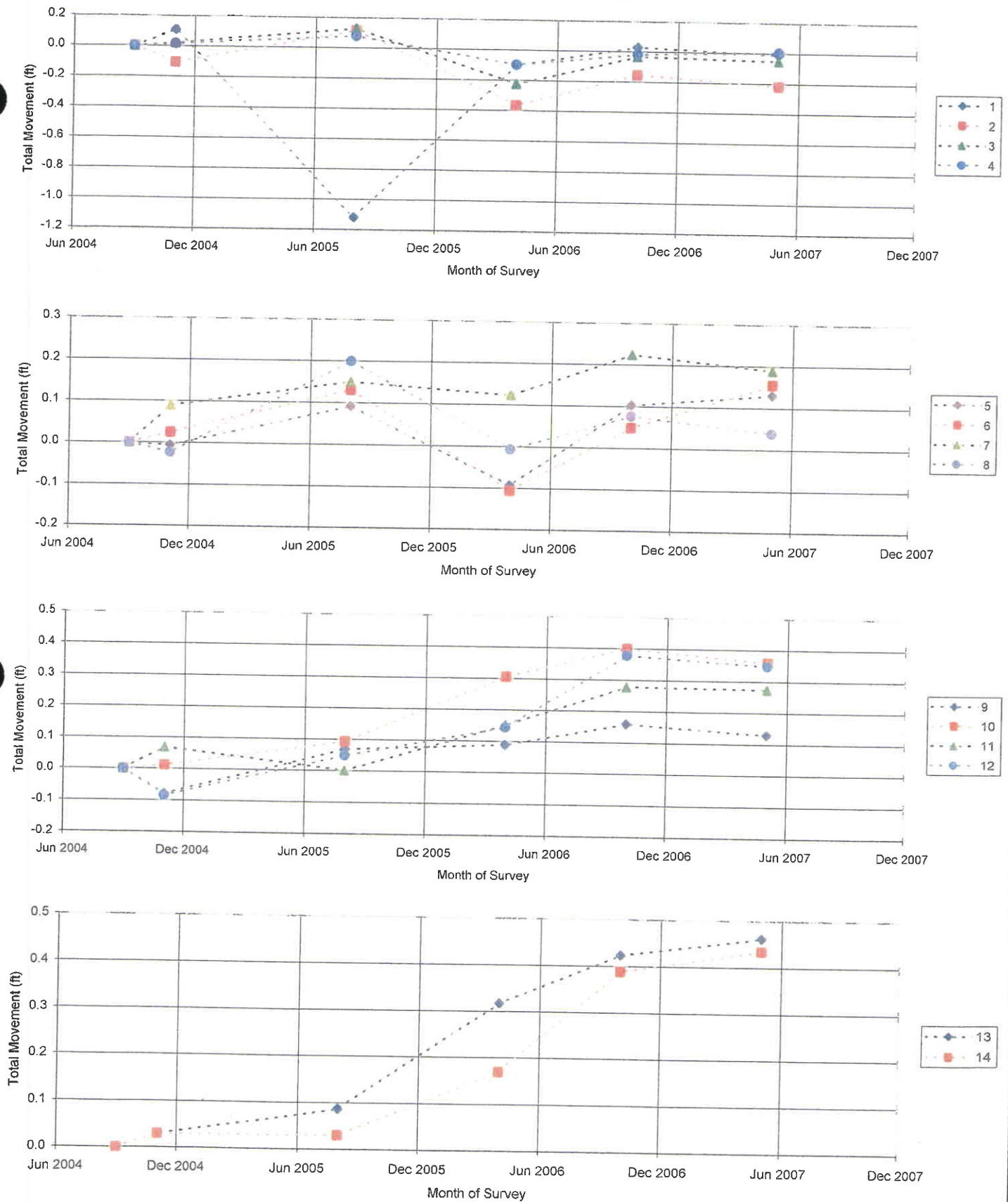
WEST RIDGE RESOURCES, INC.
GRASSY TRAIL RESERVOIR SUBSIDENCE SURVEY

STATION	NORTHING	EASTING	ELEVATION	NORTHING	EASTING	ELEVATION	NORTHING	EASTING	ELEVATION	NORTHING	EASTING	ELEVATION	NORTHING	EASTING	ELEVATION	NORTHING	EASTING	ELEVATION	DESCRIPTION
CALIBRATION CONTROL																			
1	38680.51	37416.3	7591.25																drill hole in stone
24	37041.51	39338.42	7453.47																aerial
2	40772.17	37689.12	7645.98																aerial
MEASURED																			
1	38219.95	36571.37	8172.50	38220.06	36571.39	8172.74	38218.83	36572.19	8172.48	38219.85	36572.39	8171.43	38219.98	36572.48	8170.75	38219.94	36572.55	8170.66	
2	38252.72	36617.52	8129.70	38252.61	36617.52	8129.79	38252.84	36617.76	8129.43	38252.36	36618.19	8128.76	38252.57	36618.24	8128.12	38252.50	36618.24	8128.04	1/2" rebar w/cap
3	38263.93	36653.34	8094.67	38263.95	36653.36	8094.74	38264.06	36653.59	8094.52	38263.71	36654.04	8093.74	38263.98	36654.21	8093.38	38263.88	36654.28	8093.37	1/2" rebar w/cap
4	38298.57	36688.08	8059.73	38298.59	36687.98	8059.67	38298.61	36688.16	8059.50	38298.47	36688.71	8058.82	38299.55	36688.92	8058.41	38298.58	36688.94	8058.54	1/2" rebar w/cap
5	38301.95	36730.52	8023.64	38301.94	36730.42	8023.62	38302.04	36730.77	8023.47	38301.86	36731.28	8022.88	38302.05	36731.49	8022.56	38302.08	36731.51	8022.64	1/2" rebar w/cap
6	38325.65	36774.39	7987.63	38325.68	36774.33	7987.66	38325.78	36774.54	7987.57	38325.54	36775.01	7987.02	38325.70	36775.28	7986.89	38325.81	36775.38	7986.76	1/2" rebar w/cap
7	38331.28	36827.08	7949.99	38331.37	36827.10	7950.15	38331.43	36827.41	7949.84	38331.40	36827.69	7949.51	38331.51	36828.21	7949.29	38331.47	36828.18	7949.33	1/2" rebar w/cap
8	38313.55	36858.96	7935.33	38313.63	36858.92	7935.29	38313.75	36859.28	7935.07	38313.54	36859.72	7934.72	38313.63	36859.97	7934.48	38313.59	36860.02	7934.71	1/2" rebar w/cap
9	38319.30	36849.35	7883.24	38319.32	36849.28	7883.21	38319.37	36849.48	7883.16	38319.39	36850.18	7882.75	38319.46	36850.41	7882.55	38319.43	36850.43	7882.60	1/2" rebar w/cap
10	38440.86	36972.65	7844.41	38440.87	36972.67	7844.42	38440.95	36973.01	7844.41	38441.17	36973.49	7844.07	38441.26	36973.76	7843.91	38441.22	36973.78	7843.95	1/2" rebar w/cap
11	38476.43	37003.67	7816.06	38476.50	37003.71	7816.13	38476.43	37003.82	7816.01	38476.58	37004.46	7815.72	38476.71	37004.85	7815.69	38476.71	37004.89	7815.69	1/2" rebar w/cap
12	38509.85	37047.46	7768.87	38509.77	37047.37	7768.84	38509.90	37047.63	7768.75	38510.00	37048.21	7768.46	38510.23	37048.61	7768.39	38510.20	37048.61	7768.45	1/2" rebar w/cap
13	38555.42	37064.56	7771.43	38555.45	37064.60	7771.39	38555.51	37064.70	7771.30	38555.74	37065.31	7770.95	38555.84	37065.72	7770.85	38555.88	37065.72	7771.00	1/2" rebar w/cap
14	38610.87	37098.85	7739.26	38610.90	37098.90	7739.21	38610.96	37099.06	7739.13	38611.04	37100.42	7738.83	38611.26	37100.75	7738.66	38611.31	37100.79	7738.77	1/2" rebar w/cap
31	40040.26	35537.78	8074.27	40040.36	35537.75	8074.25	40040.27	35537.64	8074.14	40040.02	35537.59	8073.53	40040.30	35538.21	8073.60	40040.33	35538.25	8073.54	1/2" rebar w/cap
32	40101.53	35681.63	8079.63	40101.61	35681.70	8079.68	40101.53	35681.60	8079.54	40101.25	35681.55	8079.40	40101.64	35682.07	8079.14	40101.64	35682.09	8079.07	1/2" rebar w/cap
33	40180.47	35798.59	8075.64	40180.55	35798.62	8075.62	40180.37	35798.56	8075.47	40180.19	35798.45	8075.33	40180.57	35800.10	8075.22	40180.58	35800.14	8075.13	1/2" rebar w/cap
34	40271.72	35871.88	8068.59	40271.76	35871.89	8068.59	40271.50	35871.81	8068.29	40271.44	35871.72	8068.32	40271.82	35872.32	8068.21	40271.85	35872.35	8068.17	1/2" rebar w/cap
35	40342.59	35936.99	8042.84	40342.59	35937.05	8042.83	40342.42	35936.96	8042.64	40342.22	35936.90	8042.63	40342.62	35937.54	8042.51	40342.66	35937.58	8042.45	1/2" rebar w/cap
36	40401.33	35978.12	8013.00	40401.43	35978.06	8012.93	40401.29	35978.09	8012.85	40401.13	35977.98	8012.73	40401.48	35978.63	8012.60	40401.50	35978.68	8012.57	1/2" rebar w/cap
37	40483.53	36033.85	7961.94	40483.65	36033.88	7961.94	40483.47	36033.73	7961.81	40483.33	36033.65	7961.70	40483.66	36034.36	7961.62	40483.70	36034.44	7961.65	1/2" rebar w/cap
38	40457.48	36107.51	7911.64	40457.59	36107.55	7911.76	40457.46	36107.54	7911.50	40457.31	36107.48	7911.33	40457.65	36108.20	7911.32	40457.74	36108.17	7911.32	1/2" rebar w/cap
39	40384.66	36157.80	7870.68	40384.85	36157.81	7870.78	40384.53	36157.75	7870.68	40384.39	36157.40	7870.42	40384.82	36158.19	7870.35	40384.90	36158.24	7870.35	1/2" rebar w/cap
40	40369.45	36207.99	7835.48	40369.60	36208.01	7835.58	40369.37	36207.96	7835.12	40369.39	36207.89	7835.19	40369.65	36208.67	7835.13	40369.70	36208.64	7835.11	1/2" rebar w/cap
41	40412.36	36328.47	7766.41	40412.52	36328.41	7766.57	40412.33	36328.35	7766.31	40412.05	36328.34	7766.39	40412.32	36328.86	7766.16	40412.30	36328.95	7766.18	1/2" rebar w/cap
42	40468.98	36430.80	7766.77	40469.11	36430.79	7766.91	40468.87	36430.73	7766.64	40468.71	36430.69	7766.87	40468.86	36431.16	7766.58	40468.93	36431.23	7766.61	1/2" rebar w/cap
43	40456.36	36547.60	7739.37	40456.51	36547.56	7739.55	40456.34	36547.59	7739.44	40456.20	36547.44	7739.25	40456.23	36547.80	7739.20	40456.26	36547.82	7739.22	1/2" rebar w/cap
44	40495.04	36677.03	7720.64	40495.16	36676.98	7720.75	40495.05	36676.94	7720.69	40494.76	36676.73	7720.55	40494.91	36678.86	7720.47	40494.99	36678.89	7720.52	1/2" rebar w/cap
45	40539.96	36788.54	7710.28	40540.10	36788.58	7710.37	40539.93	36788.54	7710.27	40539.61	36788.30	7710.25	40539.70	36788.33	7710.16	40539.76	36788.33	7710.17	1/2" rebar w/cap
46	--	--	--	39499.87	35025.60	8431.39	39499.78	35025.57	8431.30	39499.59	35025.41	8431.07	39499.84	35025.94	8430.67	39499.85	35025.91	8430.66	1/2" rebar w/cap
47	--	--	--	39614.25	35140.80	8368.35	39614.13	35140.76	8369.16	39613.90	35140.71	8369.06	39614.14	35141.17	8368.69	39614.16	35141.11	8368.65	1/2" rebar w/cap
48	--	--	--	39708.67	35258.00	8284.45	39708.56	35257.99	8284.30	39708.25	35257.81	8283.96	39708.48	35258.21	8283.58	39708.45	35258.09	8283.50	1/2" rebar w/cap
49	--	--	--	39797.85	35379.02	8203.46	39797.67	35378.99	8203.35	39797.45	35378.99	8203.08	39797.61	35379.42	8202.74	39797.60	35379.34	8202.69	1/2" rebar w/cap



WARE SURVEYING, L.L.C.
1344 North 1000 West - Provo, UT 84601
Office: 435-513-1286
Email: waresurveying@earthlink.net

Change in Northing Coordinate over Time



**RB&G
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INC.**
PROVO, UTAH

FIGURE D-2a

POINTS 1-14 - CHANGES IN NORTHING COORDINATES
GRASSY TRAIL DAM AND RESERVOIR - CARBON COUNTY, UTAH

Change in Easting Coordinate over Time

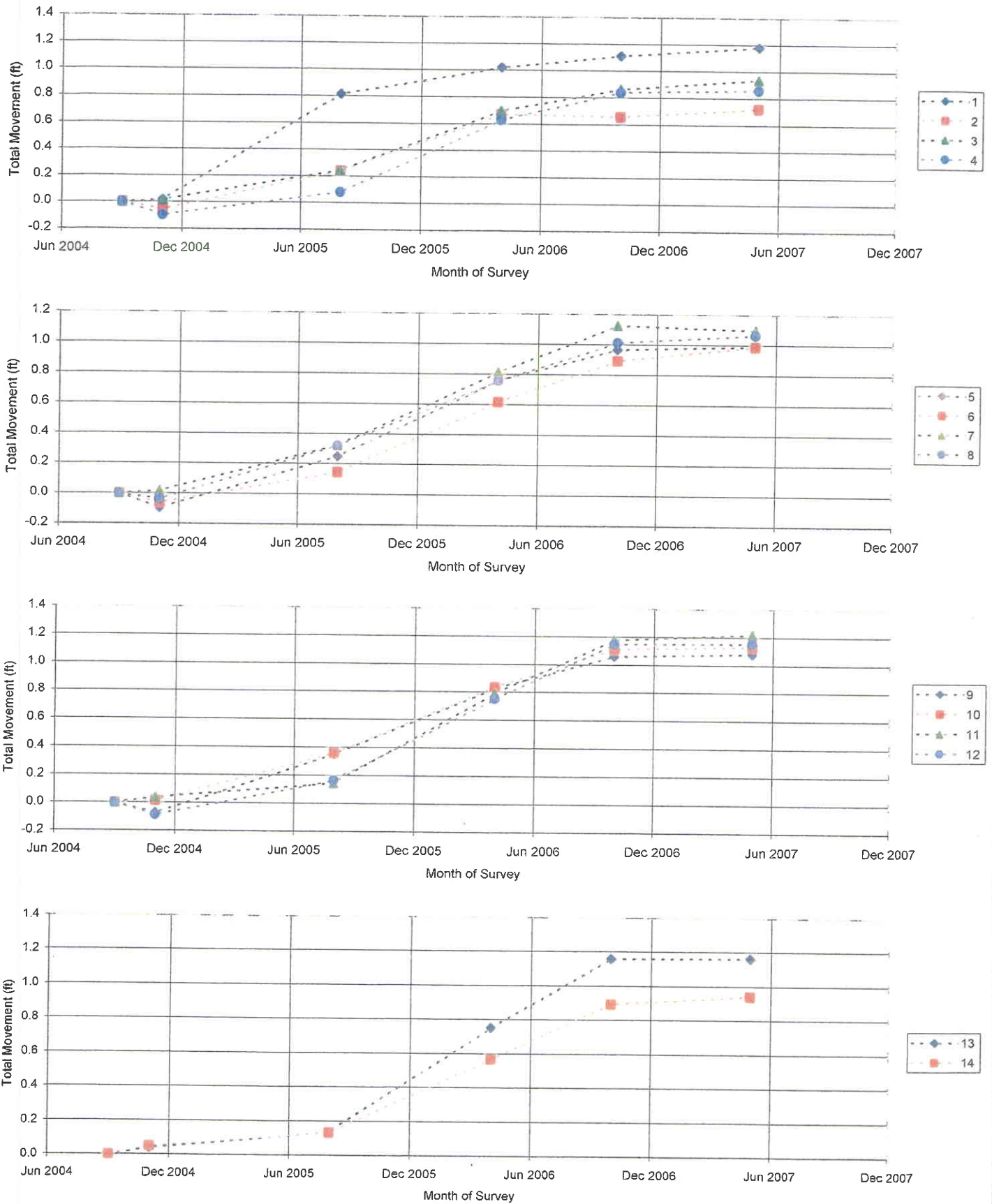


FIGURE D-2b

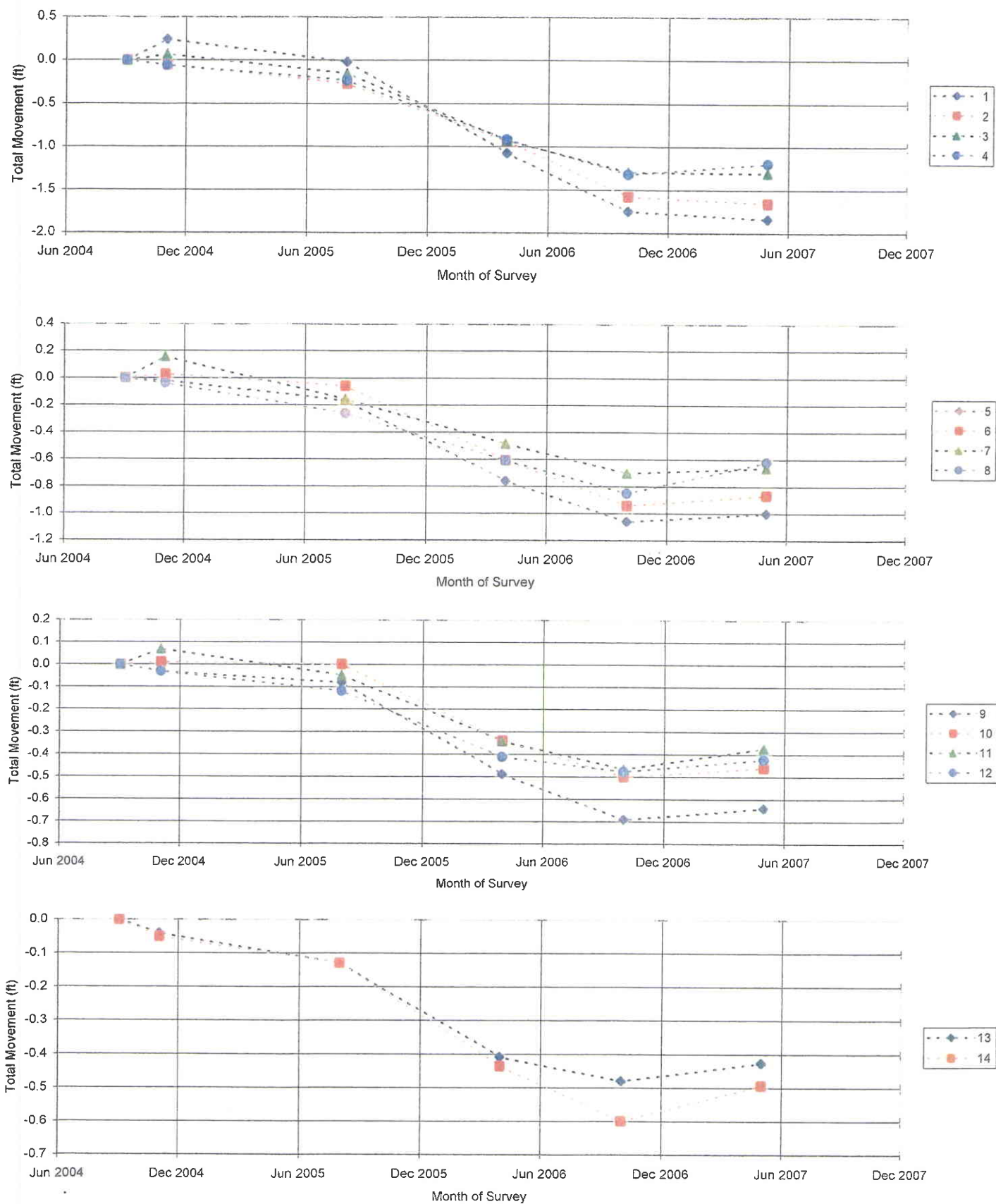
POINTS 1-14 - CHANGES IN EASTING COORDINATES
GRASSY TRAIL DAM AND RESERVOIR - CARBON COUNTY, UTAH



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Change in Elevation over Time

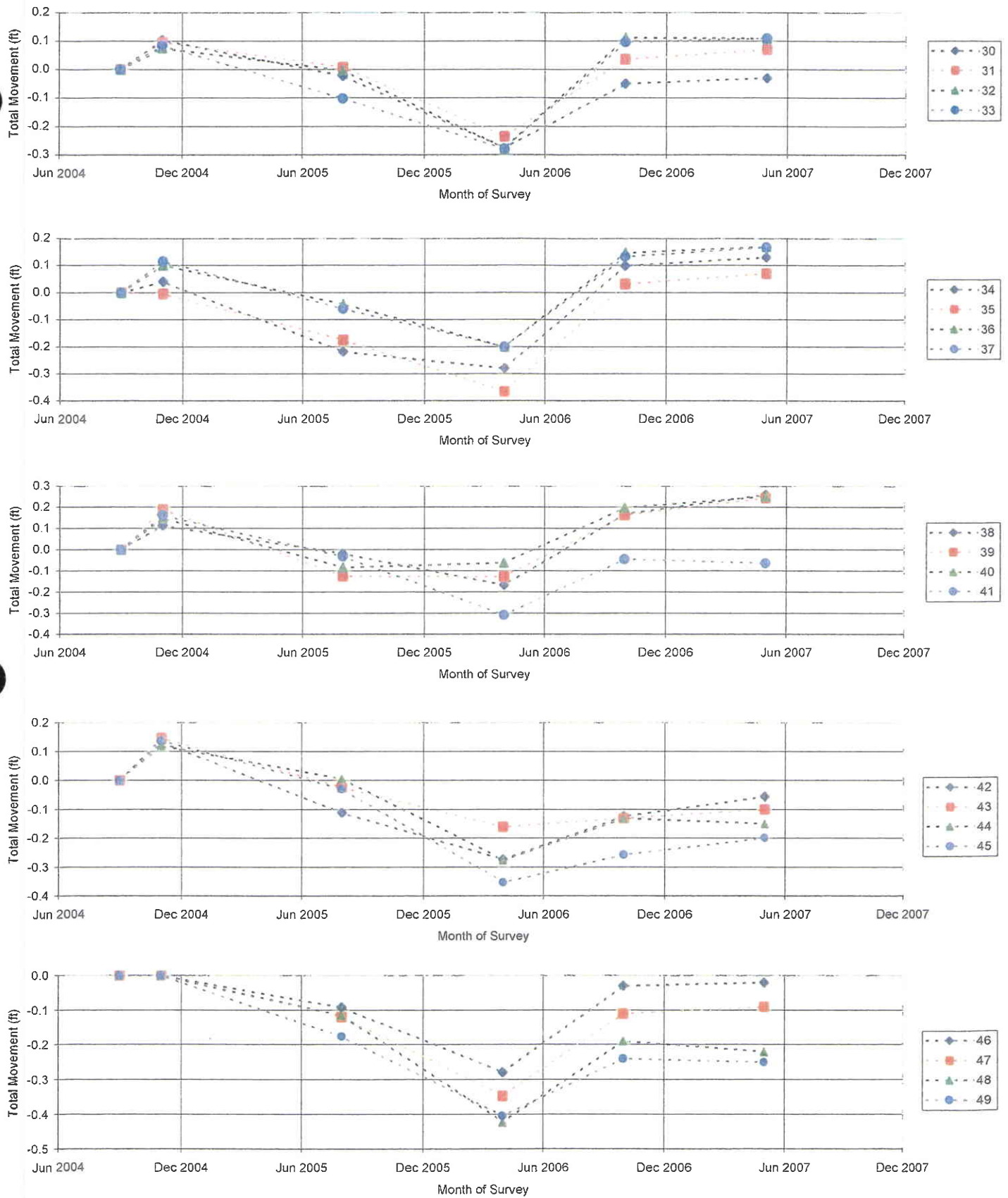


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FIGURE D-2c

POINTS 1-14 - CHANGES IN ELEVATION COORDINATES
GRASSY TRAIL DAM AND RESERVOIR - CARBON COUNTY, UTAH

Change in Northing Coordinate over Time



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FIGURE D-3a

POINTS 30-49 - CHANGES IN NORTHING COORDINATES
GRASSY TRAIL DAM AND RESERVOIR - CARBON COUNTY, UTAH

Change in Easting Coordinate over Time

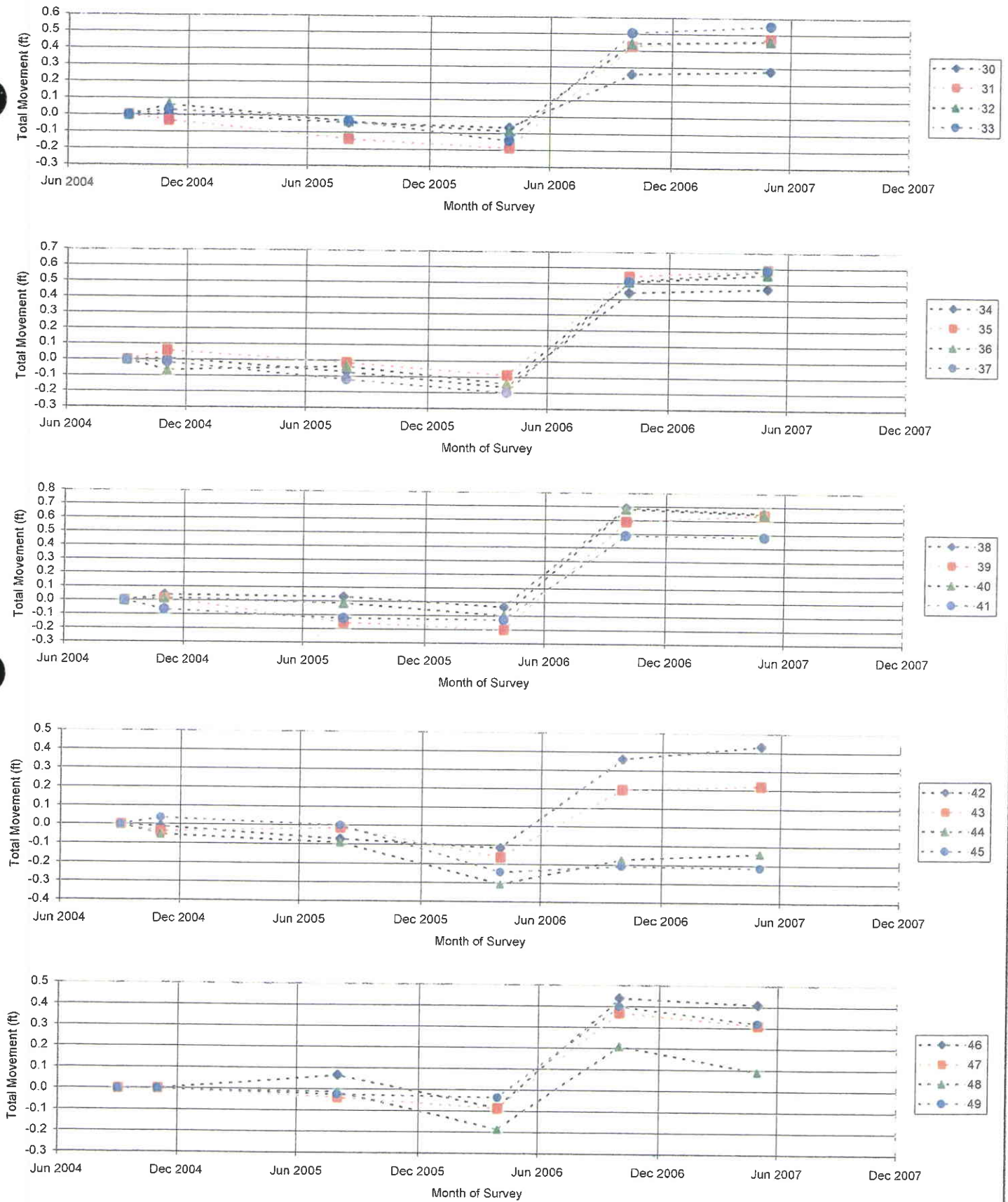


FIGURE D-3b

POINTS 30-49 - CHANGES IN EASTING COORDINATES
GRASSY TRAIL DAM AND RESERVOIR - CARBON COUNTY, UTAH



**RB&G
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INC.**
PROVO, UTAH

Change in Elevation over Time

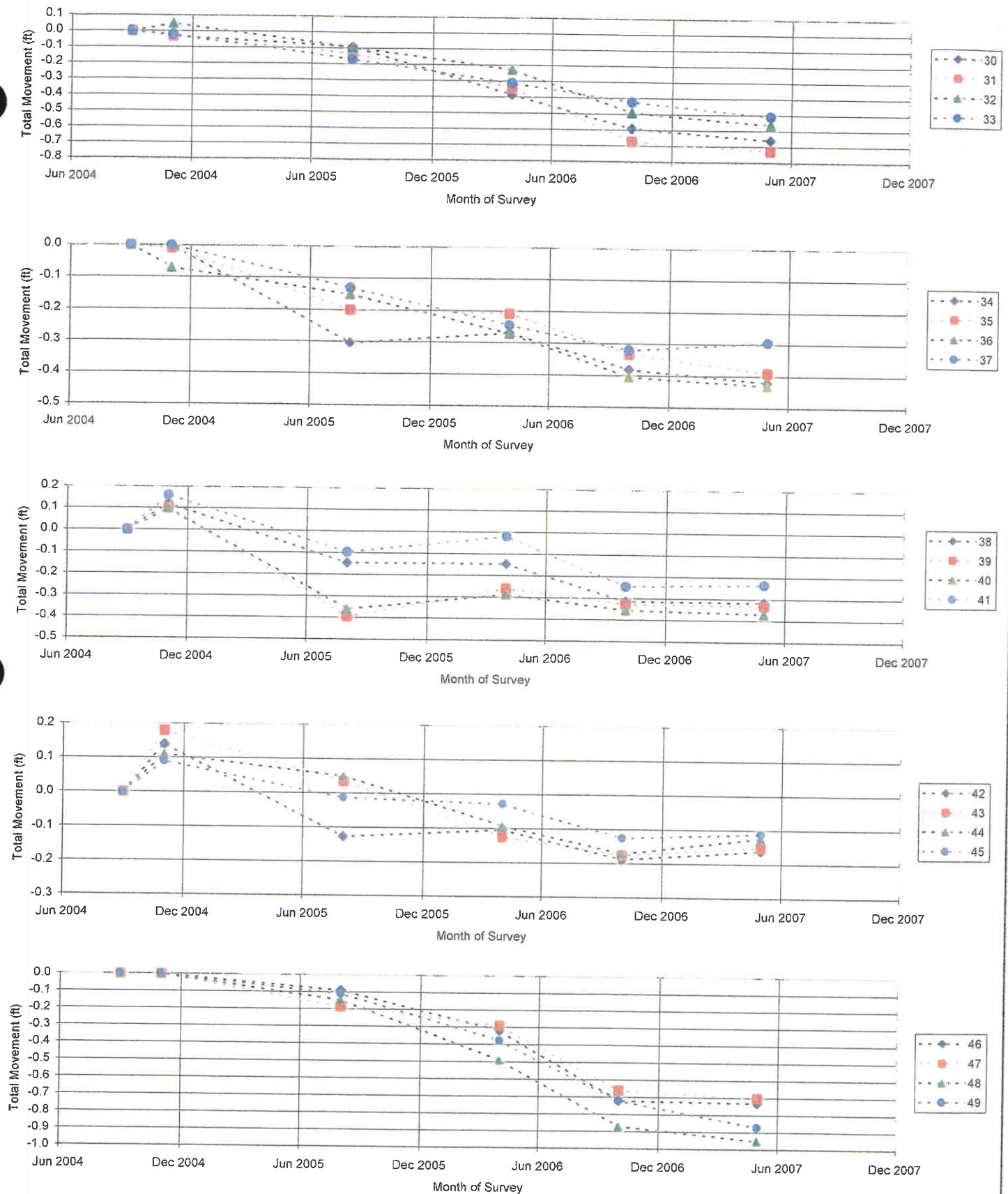


FIGURE D-3c

POINTS 30-49 - CHANGES IN ELEVATION COORDINATES
GRASSY TRAIL DAM AND RESERVOIR - CARBON COUNTY, UTAH



**RB&G
ENGINEERING
INC.**
PROVO, UTAH



WARE SURVEYING, L.L.C.



1344 North 1000 West – Price, UT 84501

Office: 435-613-1266

Email: waresurveying@emerytelcom.net

August 6, 2007

UtahAmerican Energy
Attn: Dave Shaver

Dear Mr. Shaver,

The purpose of this letter is to document a portion of my involvement with the subsidence monitoring survey of the Grassy Trail Reservoir dam. My company was hired by the West Ridge Mine as a survey consultant to monitor the dam in October of 2005. My monitoring of the dam included GPS, Total Station, and Differential Level observations. In this letter I will summarize the "straight-line" observations that were made at the dam.

In May of 2006 Dave Shaver made the recommendation to perform a "straight-line" observation of a number of points along the surface of the dam. This observation consisted of setting up an optical survey instrument at one end of the dam and setting markers along the dam that are all on the same sight line. Once the marks were set any movement in a direction perpendicular to the sight line would be easily detected. On May 26, 2006 I set the marks along the dam and made the initial or base line survey. At the East end of the dam I pounded a 6-foot long roof bolt (1" diameter solid steel rod) to within 1 foot of the dam surface. I also placed concrete around the roof bolt to a depth of 30 inches. I then set up an optical survey instrument (a Sokkia Set 2 B 2 Total Station) over the roof bolt and sighted a straight line along the dam to the West. On this straight line I was able to line up with a number of the existing monitoring wells that are located along the dam. These wells are square metal tubing that are approximately 4" X 4" and stick out of the ground a couple of feet. I was then able to line up my survey helper who drew a vertical line on 4 of these monitoring wells that were all in a straight line with each other and the roof bolt that I was set up over. Since placing the marks and performing the initial survey I have made 12 subsequent observations of this straight line on the dates shown below. On every survey I set up the same instrument over the roof bolt on the East end of the dam and sighted a straight line to the West along the monitoring well marks. And on every survey all of the marks were on the same East-West sight line, which indicates there was no movement in a North-South direction for the duration of the survey. Beginning on December 14, 2006 we also started measuring distances from the control point on the East end to each of the monitoring wells. These distances were then checked on the subsequent observation dates, and have shown no movement in the East-West direction.

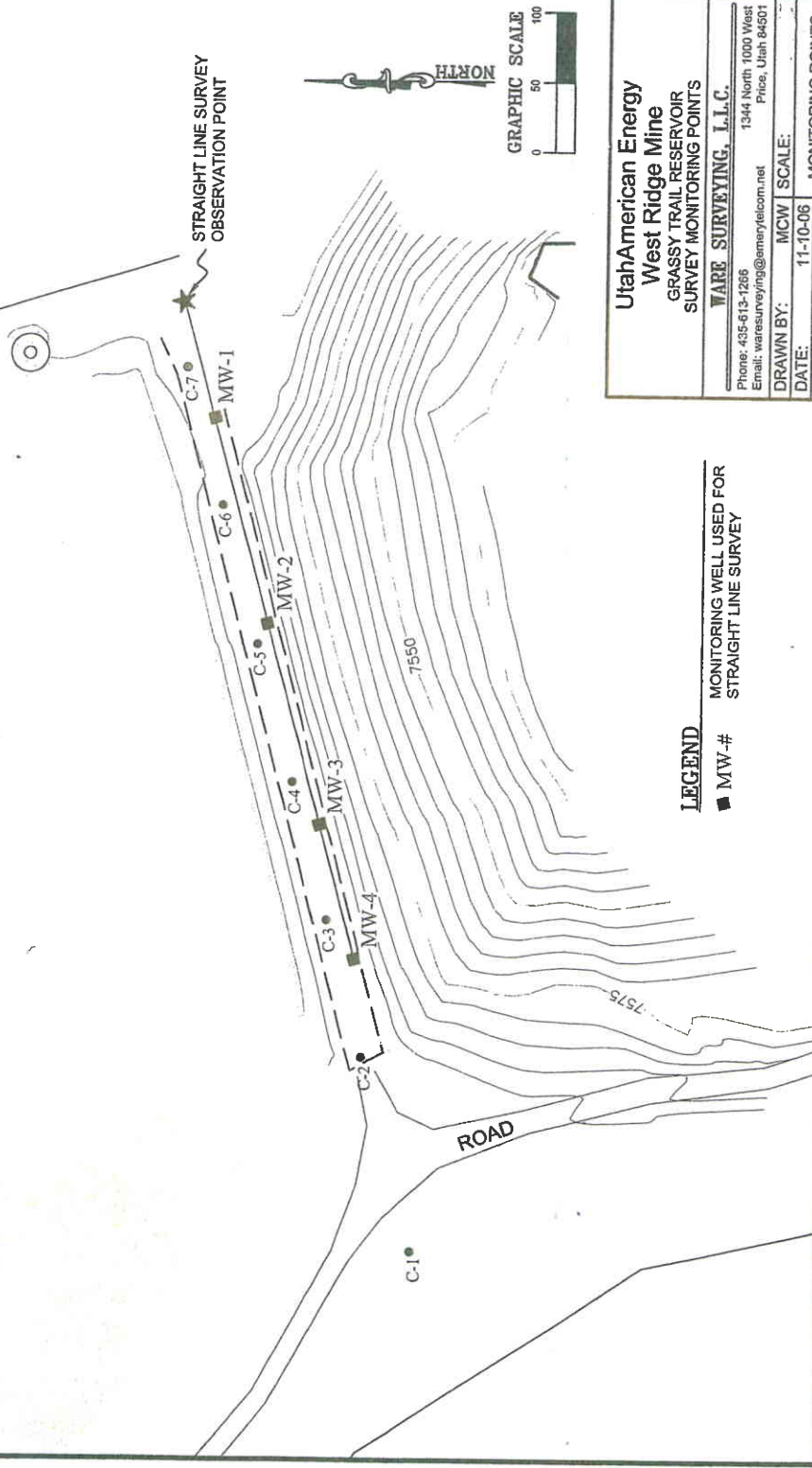
Straight-line survey observation dates:

- | | |
|-----------------|----------------------|
| • May 26, 2006 | • August 11, 2006 |
| • May 30, 2006 | • September 18, 2006 |
| • June 4, 2006 | • October 19, 2006 |
| • June 12, 2006 | • December 14, 2006 |
| • June 16, 2006 | • January 31, 2007 |
| • June 20, 2006 | • March 1, 2007 |
| • June 23, 2006 | • March 29, 2007 |
| • June 30, 2006 | • May 30, 2007 |
| • July 11, 2006 | • June 5, 2007 |
| • July 20, 2006 | • July 1, 2007 |

Sincerely,

M. Cody Ware, PLS

GRASSY TRAIL RESERVOIR



LEGEND

■ MW-# MONITORING WELL USED FOR
STRAIGHT LINE SURVEY

UtahAmerican Energy
West Ridge Mine
GRASSY TRAIL RESERVOIR
SURVEY MONITORING POINTS
WARE SURVEYING, L.L.C.

Phone: 435-613-1286	1344 North 1000 West
Email: waresurveying@amerylecom.net	Price, Utah 84501
DRAWN BY: MCW	SCALE:
DATE: 11-10-06	MONITORING POINTS
REVISIONS:	0

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INC.**

PROVO, UTAH

FIGURE D-4

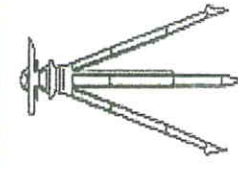
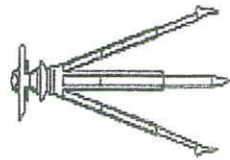
**LOCATIONS OF SURVEY POINTS ON DAM CREST
GRASSY TRAIL DAM - CARBON COUNTY, UTAH**

TABLE D-2 SURVEYED DISTANCES ALONG DAM CREST

UtahAmerican Energy
West Ridge Mine
 Grassy Trail Reservoir
 "Straight line" survey data

8/9/2007

STATION	Distance from control point to face of Monitoring Well (MW) in feet									
	12/14/2006	1/31/2007	3/1/2007	3/29/2007	5/30/2007	6/5/2007	7/1/2007			
MW-1	94.21	94.21	94.21	94.21	94.20	94.20	94.20			
MW-2	141.49	141.49	141.49	141.49	141.49	141.49	141.49			
MW-3	245.90	245.90	245.90	245.90	245.89	245.89	245.89			
MW-4	295.13	295.13	295.13	295.13	295.12	295.12	295.12			
MW-5	394.71	394.71	394.71	394.71	394.70	394.69	394.69			
MW-6	493.96	493.96	493.96	493.95	493.94	493.94	493.94			
MW-7	556.71	556.71	556.71	556.70	556.70	556.68	556.69			
MW-8	708.27	708.27	708.27	708.27	708.26	708.25	708.26			
Movement in straight line survey	no	no	no	no	no	no	no			



WARE SURVEYING, L.L.C.

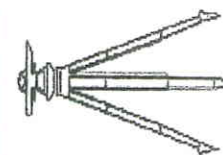
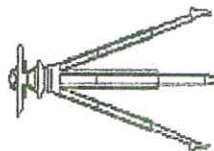
1344 North 1000 West - Price, UT 84501
 Office: 435-613-1266
 Email: waresurveying@emerytelcom.net

TABLE D-3 ELEVATIONS OF SETTLEMENT MONITORING POINTS ON DAM CREST

UtahAmerican Energy
West Ridge Mine
 Grassy Trail Reservoir
 Differential Level survey data

10/16/2007

STATION	C-1	C-2	C-3	C-4	C-5	C-6	C-7
NORTHING	38,830.55	38,865.88	38,892.13	38,917.88	38,943.74	38,969.37	38,996.01
EASTING	37,333.20	37,471.64	37,570.28	37,668.82	37,767.40	37,866.16	37,964.74
Differential level survey date.							
7/30/2002 Elevation	7593.49	7590.63	7590.29	7590.67	7590.44	7590.08	7590.08
8/29/2003 Elevation	7593.50	7590.65	7590.31	7590.69	7590.46	7590.08	7590.08
10/27/2004 Elevation	7593.50	7590.62	7590.30	7590.68	7590.45	7590.08	7590.08
8/12/2005 Elevation	7593.52	7590.66	7590.32	7590.69	7590.46	7590.09	7590.08
3/21/2006 Elevation	7593.50	7590.70	7590.30	7590.68	7590.45	7590.09	7590.08
4/14/2006 Elevation	7593.53	7590.73	7590.31	7590.67	7590.44	7590.08	7590.08
5/4/2006 Elevation	7593.54	7590.75	7590.31	7590.66	7590.43	7590.08	7590.08
5/30/2006 Elevation	7593.55	7590.78	7590.31	7590.65	7590.43	7590.07	7590.08
8/11/2006 Elevation	7593.49	7590.79	7590.31	7590.64	7590.43	7590.07	7590.08
9/18/2006 Elevation	7593.51	7590.82	7590.33	7590.66	7590.43	7590.08	7590.08
10/09/2007 Elevation	7593.54	7590.83	7590.33	7590.67	7590.44	7590.08	7590.08



WARE SURVEYING, L.L.C.

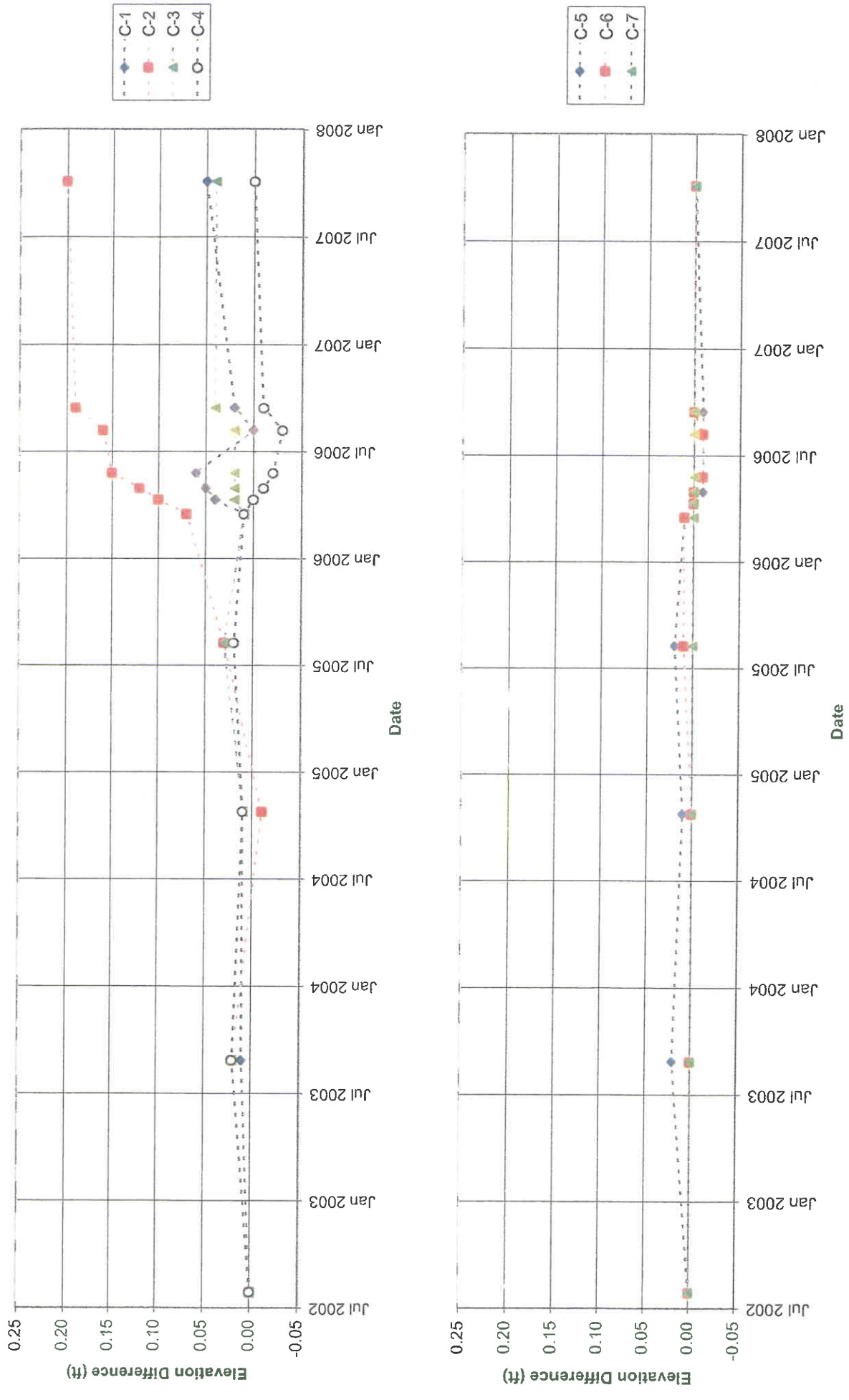
1344 North 1000 West - Price, UT 84501
 Office: 435-613-1266
 Email: waresurveying@emerytelcom.net



**RB&G
ENGINEERING
INC.**
PROVO, UTAH

FIGURE D-5

SURVEY POINTS ON DAM - CHANGE IN ELEVATION VERSUS TIME
GRASSY TRAIL DAM - CARBON COUNTY, UTAH



APPENDIX 5-17
GRASSY TRAIL SUMMARY UPDATE REPORT
RB&G ENGINEERING, 2010

APPENDIX 5-17

GRASSY TRAIL DAM AND RESERVOIR
MINING-INDUCED SEISMICITY
SUMMARY UPDATE REPORT, 2010

MINING-INDUCED SEISMICITY

RB&G
ENGINEERING, INC.

NEAR GRASSY TRAIL DAM AND RESERVOIR

Carbon County, Utah



Summary Update Report, January 2008 to July 2010



Prepared for



WEST RIDGE
RESOURCES, INC.

September 3, 2010

Dave Shaver
West Ridge Resources, Inc.
P.O. Box 910
East Carbon, UT 84520

Subject: Mining-Induced Seismicity Summary Update Report – January 2008 to July 2010
Near Grassy Trail Dam and Reservoir

Gentlemen:

A Summary Update Report has been completed for the Mining-Induced Seismicity Study at the Grassy Trail Dam and Reservoir in Carbon County, Utah.

We appreciate the opportunity of providing this service for you. If there are any questions relating to the information contained herein, please call:

Sincerely,

RB&G ENGINEERING, INC.

Michael N. Hansen, P.G.

Bradford E. Price, P.E.

bep/jag

Summary Update Report
January 2008 – July 2010

Mining-Induced Seismicity Near Grassy Trail Dam And Reservoir

Carbon County, Utah

Prepared for:
West Ridge Resources, Inc.

September 2010

RB&G ENGINEERING, INC.

**MINING-INDUCED SEISMICITY
NEAR GRASSY TRAIL DAM AND RESERVOIR**
Carbon County, Utah

Summary Update Report January 2008 – July 2010

1. INTRODUCTION

This report summarizes monitoring activities conducted at Grassy Trail Dam and Reservoir primarily between the months of January 2008 and July 2010. The project area is shown on Figure 1. The primary purpose of this study has been to monitor the effects of mining-induced seismicity on the dam and reservoir during and following the mining of Panel 7 in West Ridge Mine, and to evaluate potential effects of mining in Panels 18, 19, and 20 near the north end of the reservoir. The locations of instrumentation used for the monitoring program are shown on Figure 2. This report is an update to the January 2008 Summary Report (Grassy Trail Dam and Reservoir, Mining Induced Seismicity Summary Report January 2008, *RB&G Engineering, January 31, 2008*), which summarized monitoring activities between August 2005 and January 2008. This included the seismic monitoring and ground movements which occurred while mining was at its closest point to the dam in Panel 7 during 2006.

1.1 Mining Timeline and Proximity to Reservoir

Figure 3 shows the location of the West Ridge Mine operation relative to Grassy Trail Dam and Reservoir. This figure shows the locations of Panels 6 and 7 on the west side of the reservoir, which were mined in 2005 and 2006. It should be noted that the coal seam mined was 1664 feet vertically below the crest of the dam. The nearest point on Panel 7 was 995 feet horizontally west of the dam's right abutment. Following completion of Panel 7, the mining operation moved to Panel 8, located between 2.7 and 4.7 miles west northwest of the reservoir (north of the previously-mined panels) as shown on Figure 1. The projected areas to be mined in the next two years are shown on Figure 3. From this figure, it appears that future mining will gradually progress in an easterly direction, moving closer to the reservoir. Figure 3 also shows the locations of panels 18, 19, and 20 which are closest to the reservoir and

their projected mining dates as of May 2010. This figure shows a small section west of Panel 18 about 2,700 feet long and 300 feet wide which is proposed to be mined from August through November 2010.

2. PRESENTATION OF MONITORING DATA

Summaries of monitoring data obtained by RB&G Engineering from seismic ground motion instruments, the University of Utah Seismograph Stations (UUSS), and inclinometers are included in the Figure and Table section of this report. Summaries of monitoring data performed by others from piezometers, seepage points, and survey points are presented in the appendix of this report. This section discusses the apparent correlations between the mining operations at West Ridge Mine and the data collected at Grassy Trail Dam and Reservoir.

2.1 Ground Motion Monitoring Devices

The Instantel Minimate geophones have provided monitoring of seismic ground motions at the site since January 2005. The instruments have been sent to the manufacturer for re-calibration several times since their installation. During calibration, one device was always left in operation while the other was being re-calibrated. This was done to ensure that at least one device would be present at the site at all times to provide continuous data during the full duration of the study. Currently one instrument is located on the dam while the other remains on the hillside where it was located during mining of Panel 7.

Tables and graphs summarizing the Minimate data are included in the Figure and Table section of this report. A summary of the number of events per month and the characteristics of the largest event each month since January 2008 is tabulated on Table A-1.

The number of seismic events recorded on the Dam and Hillside per day since January 2008 are plotted on Figure A-1. The number of seismic events per day reported by the UUSS is also plotted on this figure. The figure shows that the dam and hillside seismic units recorded the most daily events during January 2008, with a high of only two events per day. The daily

number of events recorded at the reservoir decreased significantly after January with one event recorded in February, and the last recorded MIS event in December 2008.

In contrast, the maximum number of daily earthquakes recorded by UUSS gradually declined from January through June 2008, from a high of eight events in one day in January to only one event reported during the month July. In August, the number of events began to increase again, fluctuated greatly through December 2008. In January 2009, the number of events began to increase again, reaching as many as 11 events in one day.

During February 2009, a magnitude 2.1 event resulted in mining operations being shut down and then restarted with a panel and barrier method, leaving larger un-mined panels between mined panels. This method resulted in a significant decrease in the number of MIS events, with only twelve events reported from March 2009 to November 2009. Between November 2009 and July 2010 only one event has been reported (April, magnitude 0.1).

It should be noted that during mining in Panel 7 (March 2006), a 2.6 magnitude event was reported along with numerous events greater than magnitude 2.0 up through February 2009. These trends are also illustrated on Figure A-2, which shows events per week rather than events per day. As a comparison with the events from 2006 to 2008, we have included Figures A-1a and A-2a showing the all of the events from January 2006 to July 2010.

Figure A-3 shows the number of events recorded weekly at the reservoir during 2006, as well as the approximate horizontal distance from the mining to the dam at a given time. The number of events detected at the reservoir appears to be a function of the proximity of recent mining. This figure shows that the maximum number of weekly events at the reservoir does not directly coincide with the closest distance to the ongoing mining. Instead, the period of most frequent events lags several weeks behind the period of nearest mining activity. This lag time is likely caused by the tendency of the longwall ceiling to hang up for a period of time while building up stresses sufficient to collapse a portion of the roof.

Lag time is likely also associated with the movement of the landslides in 2006 during the mining of Panel 7. It is our opinion that once the slide started moving, it gained some of its

own momentum and some of the continued movement of the slide in the late summer and fall of 2006 was due to this lag time delay and the time needed for the slide to regain its own stability. It is our opinion that this latter movement was more likely associated with this stability and lag time, and less from the continued mining toward the northern end of Panel 7, which was further away from the dam.

The maximum weekly MIS earthquake event and Peak Ground Acceleration (PGA) values recorded at the reservoir from 2008 to July 2010 are plotted versus time on Figure A-4. The time period during which the greatest acceleration values and the highest number of events (four events) took place were during January and the first week of February 2008. During this time, the maximum PGA value was only 0.0265g. The next and last recorded event was picked up by the Hill Side Unit during the first week of December 2008 with a PGA value of 0.0133g. No MIS event was report by the UUSS for the December event. For comparison, Figure A-4a shows these maximum weekly values from January 2008 to July 2010.

An overview of the seismic activity in the area showing the number of MIS earthquakes reported by the UUSS per month since 2006 to July 2010 is shown on Figure A-5. Figure A-6 shows the earthquake magnitudes for each of these events since January 2006 to July 2010. From these figures, it is apparent that there was a significant decrease in the number of MIS events from October 2006 to March 2007. This corresponds with the move to Panel 8 which had significantly less cover over the mining area. We also see a significant drop in the number of events starting in February 2009 when the mine changed to a panel barrier method of mining. As shown on Figure A-6, there has been a significant change in the magnitudes of the earthquakes after February 2009. Prior to February 2009 the average event magnitude was 1.5. Since February, the largest magnitude events have been 1.4 with an average magnitude of 1.1. This change in number and magnitude of events appears to be related to the changes in mining practices.

2.2 Inclinometers

Figure 2 shows the location of each inclinometer. Data from the four inclinometers at the reservoir are compiled in the Figure and Table section of this report. A discussion of data

obtained from each inclinometer is presented below. It should be noted that some of the data prior to 2008 is not included in the following sections and figures. For detailed information prior to 2008, the Grassy Trail Dam and Reservoir, Mining-Induced Seismicity, Summary Report, January 2008 should be referenced.

2.2.1 Inclinometer 1

Inclinometer 1 was installed at the easterly (left) end of the dam in 1998. This inclinometer extends through approximately 48 feet of dam embankment fill and into the foundation to a total depth of about 107 feet. The positive "A" axis of this inclinometer pipe is oriented into the abutment toward the southeast, and the positive "B" axis is oriented downstream to the southwest. Deflection profiles recorded by Inclinometer 1 are shown on Figure B-1. This figure shows that the uppermost 2-foot deflection interval shows substantially greater deflections than the rest of the readings. This observation indicates only that the pipe is not rigidly confined in the soil in the upper few feet, and is not an indicator of significant ground movements.

With the exception of the uppermost point, the deflections recorded along either Inclinometer 1 axis is less than about 0.2 inch. As of July 2010, the magnitudes of the displacements in Inclinometer 1 are small, and do not exhibit a significant tendency toward instability in this area.

2.2.2 Inclinometer 2

Inclinometer 2 was installed near the west (right) end of the dam in 1998. This pipe extends to a total depth of 128 feet, including approximately 120 feet of embankment fill and underlying foundation soil before penetrating about 8 feet into sandstone bedrock. This inclinometer is oriented such that positive movement on the "A" axis indicates movement into the west abutment, and positive movement on the "B" axis is upstream toward the reservoir.

Deflection profiles for the "A" and "B" axes are shown on Figure B-2. Since January 2008 the "A" axis shows less than 0.25 inches of movement. This movement is significantly less than the approximately 3.5 inches of deflection between 2005 and 2008; with the large majority of this deflection having occurred between December 2005 and August 2006. The profiles also show deflection of about 0.5 inch in the negative "B" direction occurring between January 2008 and July 2010. After December 2008 we do not see any new significant movement. Much of the movement is within the error of the instrument. In both cases, the profiles appear to be relatively stable since the end of 2008.

The deflected shape of Inclinator 2 on January 26, 2008 relative to a baseline shape measured on July 20, 2004 is shown in plan view on Figure B-3. The figure shows that the measured deflections are oriented primarily along the dam axis from the west (right) abutment toward the maximum section to the east. The slight "bulging" noted on the "B" axis profile is in the upstream direction. Since no significant movement has occurred between 2008 and July 2010, this information is not included on this figure.

Figure B-4 shows deflections along the "A" axis of Inclinator 2 plotted versus time, beginning in February 2005 up to July 2010. The dates on Figure B-4 can be compared to the dates at which mining occurred closest to the dam. Some lateral deflection (0.4 inch over the 44 to 122-foot depth interval) occurred during Panel 6 mining in 2005. Much of the 2005 deflection occurred during the first half of the year, and measurements after June appear to demonstrate a decreasing rate of deflection. By November 2005, the ongoing deflection appears to be negligible.

As mining commenced in Panel 7, the deflections measured in Inclinator 2 began to increase substantially, with the greatest deflections occurring during and immediately following the period of shortest distance between the mining and the dam. By August 2006, the ongoing deflections were very small. By October 2006 movement became negligible.

There appears to be a very strong correlation between the deflections measured by Inclinator 2 and the proximity of longwall mining. The larger magnitudes of events recorded during Panel 7 mining compared to Panel 6 mining may also contribute to the larger lateral deflections observed during Panel 7 mining.

2.2.3 Inclinator 3

Inclinator 3 was installed in the dam's right (west) abutment in 1998. This pipe extends through about 7 feet of clayey overburden soil, underlain by predominantly mudstone to about 42 feet, and terminates after penetrating about 11 feet into sandstone at a total depth of 53 feet. The positive "A" axis of Inclinator 3 is oriented predominantly away from the dam and 20 to 25 degrees upstream of the dam axis. The positive "B" axis is oriented predominantly upstream toward the reservoir.

Profiles of deflection measurements recorded at Inclinator 3 since February 2008 are shown on Figure B-5. The deflection shape shown for the "A" axis and "B" axis shows no significant movement between February 2008 and July 2010.

Figure B-6 is a plan view of the deflection measurements in Inclinator 3 between 2004 and 2007 and includes the maximum deflection during mining. The predominant plane of back-and-forth lateral deflection is parallel to the dam axis, but an overall movement in the upstream direction is also apparent. Since no significant movement has occurred between 2008 and July 2010 this information is not included on this figure.

Figure B-7 shows the deflection for the various depth intervals plotted versus time. On this figure the trend is very similar to that shown for Inclinator 2 on Figure B-4. Again, it appears that relatively small lateral ground movements occurred at the abutment during mining of Panel 6 in 2005, followed by larger deflections occurring during Panel 7 mining. As was the case with Inclinator 2, the rate of deflection at Inclinator 3 was very small during periods of limited or more distant mining activities, such as November-December 2005 and after August 2006.

The deflections measured at Inclinator 3 are substantially smaller than those measured at Inclinator 2; however, it should be noted that the bottom eight feet of Inclinator 2 appears to be fixed in place, suggesting that the pipe may be anchored in a stationary stratum. By contrast, Inclinator 3 shows deflections beginning at the deepest measurement interval (51 to 53 feet). This observation suggests that the bottom of the Inclinator 3 pipe may not be anchored as the Inclinator 2 pipe appears to be. The 11 foot sandstone unit at the bottom of this inclinometer appears to be moving with the slide. This makes the movement recorded above the bottom only relative to the moving bottom and not to a stationary fixed point. It should be noted that the deflection values recorded only show relative movement between points and do not show absolute deflection values with a true measurement of total side movement and direction of movement.

Since October 2006 to July 2010 Inclinator 3 has not shown any significant movement.

2.2.4 Inclinator 4

Inclinator 4 was installed in February 2005 on the west rim of the reservoir upstream of the dam. This instrument is located immediately west of the roadway in the lower portion of an apparent slide mass. The pipe extends through approximately 37 feet of soil and penetrates about 30 feet into the underlying bedrock to a total depth of 67 feet. The positive "A" axis for this inclinometer is oriented in an easterly direction toward the reservoir. The positive "B" axis points downstream toward the dam.

Deflection profiles for Inclinator 4 are shown on Figure B-8. This figure show relative movement compared to a base line reading taken in July, 2007. In July of 2007 Inclinator 4 (I-4) was run over by a large truck and broken off just below ground level. Repairs were started and put on hold while the road was being widened. The new road cut caused a surficial side which buried I-4. At the time I-4 was not showing signs of movement. In May 2010 the inclinometer was located and dug out, and appears to be functional. Due to the loss of about 2 feet of pipe at the surface, new readings do not

correlate exactly with the previous readings prior to 2007. This may account for the small bulge at 62 feet, as well as the other irregularities in the survey in Figure B-8. The larger displacements shown in the upper 4 feet indicate that the top of the pipe is loose and is moving during the readings.

Taking into account the possible reading error due to the damage, the inclinometer does not show any significant movement since 2007. Some additional repairs are still needed to secure and protect the top of the instrument.

Figure B-9 shows a plan view of the Inclinometer 4 deflection measurements between February 2005 and July 2007. Disregarding the outlying points at depths of 1 and 3 feet, the deflection is predominantly eastward down the slope and into the reservoir, as would be expected.

The deflection of Inclinometer 4 along the "A" axis is plotted versus time on Figure B-10. The same trend observed at Inclinometers 2 and 3 is also apparent at Inclinometer 4. One notable difference is that the deflections attributable to mining of Panel 7 appear to subside several months earlier (around June 2006) at Inclinometer 4, while they continue until about August with slight movement into October 2006 in the west abutment area of the dam.

2.3 Piezometers and Observation Wells

The dam has been instrumented with piezometers and observation wells to allow careful monitoring of any changes in pore pressure and seepage behavior. The locations of these instruments are illustrated on Figure 3. East Carbon City is responsible for monitoring the piezometers and observation wells on a regular basis. The monitoring results are uploaded to the States Dam Safety Office web site. This information is available at (http://nrwrt1.nr.state.ut.us/cgi-bin/damview.exe?Modinfo=Viewdam&DAM_NUMBER=UT00126). Figure C-1 in the appendix shows a summary of reservoir levels and piezometer readings between 2008 and 2010. It is our understanding that Piezometer 4 (aka OW-4) located near the maximum section was not read from October 2008 until May 2010 due to a change in

personnel and problems with the lock. We understand that these problems have been resolved and the piezometer is now being read.

A review of the piezometer readings shows an occasional spike on a single piezometer reading. These spikes appear to be errors in data entry since the next reading is back to normal. With exception of the spikes, no substantial or unusual changes in water levels were observed.

2.4 Seepage Monitoring Points

Seepage through the dam, foundation, and abutments is collected at three locations, including the toe drain connected to the dam's internal drainage system, a seepage collection system located on the east (left) abutment, and a collection pipe located on the west (right) abutment. The flows from the drains are measured by recording the time to fill a container of known volume with water from each collection point. The clarity of the water has also been recorded during seepage readings. Clear seepage water indicates that the flow is adequately filtered and is not moving material through the dam or foundation. Cloudy seepage water could be a sign of internal erosion, which could lead to a piping-related failure of the structure. It should be noted that no cloudy water has been noted during our site visits. Figure C-2 in the appendix shows the reservoir elevation and seepage at each monitoring location from 2006 through June, 2010. No significant changes in seepage rates have occurred during the monitoring time.

2.5 Survey Points

West Ridge Mine contracted with Ware Surveying to provide surveys of points on the dam and the slopes west of the reservoir at various times throughout the monitoring program. We have received updates from Ware Surveying with monthly surveys taken along the dam. According to Ware Surveying, since 2008 little to no significant movement has been reported at the dam. A copy of the survey data is included in the appendix. The locations of the survey points are shown on Figure C-3 of the appendix.

3. SUMMARY AND CONCLUSIONS

This section provides a brief summary of the findings of the monitoring data described in the previous section, and presents several conclusions that may be drawn based on this data. It should be noted that mining in the West Ridge Mine continues to occur, along with regular monitoring of impacts at the reservoir site. The current mining is at a much larger distance from the dam than Panels 6 and 7, but the distance between the reservoir and active mining areas is expected to decrease over the next several years. Data collected during this future mining may lead to some refinement of the conclusions presented below.

3.1 Mining-Induced Ground Motions at Grassy Trail Reservoir

The longwall mining operation performed in Panels 6 and 7 resulted in ground motions detected on the hillside west of the dam, as well as on the crest of the dam itself. The recorded mining-induced ground accelerations at the dam were relatively small during mining of Panel 6, and increased substantially during mining of Panel 7. The number of mining-induced events detected by instrumentation at the reservoir also increased substantially during Panel 7 mining. The increase in the number of events and the recorded acceleration levels appears to be strongly connected to the increased proximity of mining. There appears to be a lag of a few weeks up to several months between the time period of closest-proximity mining and the time of maximum mining-induced ground motions at the reservoir. The following table summarizes the number of MIS events starting in 2006.

Year	UOSS MIS / Earthquake events/year	UOSS MIS / Earthquake average events/month
2006	463	38.6
2007	373	31
2008	255	21.3
2009 Jan thru Feb	47	23.5
2009 Feb thru Dec after change in mining	12	1.2
2010 Jan thru July	1	0.083

As shown in the Table above, the average number of events dropped in 2007 and 2008 and was increasing again in the first 2 months of 2009. In later part of February 2009 mining operations were changed to a panel barrier configuration. As shown on the table, the number

of MIS events has dropped significantly since February 2009, when mining practices were changed.

3.1.1 Slide Areas on Hillside West of Reservoir

Grassy Trail Reservoir is located at the junction of the left and right forks of Whitmore Canyon. The dam and reservoir are located on the Colton Formation laid down during the Tertiary Period, Eocene and Paleocene Epochs, about 38 to 56 million years ago. The formation consists of dark-reddish-brown to green beds of mudstone and shaly siltstone interbedded with yellowish to grayish-orange and grayish brown, thin, fine to medium grained quartzose sandstone, with sparse limestone beds. The formation is primarily of alluvial origin with some marginal lacustrine and deltaic deposits (Weiss and others, 1990). Bedrock appears to dip gently to the northeast at an angle of about 7 to 8 degrees.

These mudstone deposits of the Colton Formations are susceptible to sliding and are associated with landslide deposits in the region. While geologic maps of the area show landslide deposits in the region, they do not show any mapped near the dam or in the area near panels 18, 19, and 20. The lack of identified slides on the map, at and near the dam, is likely due to the scale of the mapping and also indicates that other small scale landslides may not be mapped as well.

Inclinometers 2 and 3 have been documenting movement of the landside on the west side of the dam. Significant movement of the west side took place shortly after the dam was constructed and long before current mining operations. MIS movement of this slide started in 2005. Most of the movement took place in 2006, causing about 3.5 inch of inclinometer deflection at the dam. At that time mining came within a horizontal distance of about 1,000 feet of the dam.

Inclinometer 4, located upstream of the dam on the west rim of the reservoir, has shown discrete deflections of up to 0.3 inch at a depth of about 62 feet below the ground surface. These deflections are significantly smaller than those at the dam. Very slight deflections were measured at this depth during mining of Panel 6 in 2005, but the large majority of

this deflection occurred between February and June of 2006, while mining in Panel 7 was closest to the inclinometer. Measurements recorded since June 2006 suggests that this slide area has been relatively stable since that time.

These slides may become more active as future mining activities approach the reservoir and mining-induced ground motions again increase at the site. Due to the changes in mining practices since February 2009, the number of MIS earthquake events has decreased significantly. The magnitude of the MIS earthquake events have also decreased. While MIS hazards still pose a threat to these landslide areas, it appears that, due to decreases in number and magnitude of MIS events, the potential hazards which were seen during the mining of Panel 7 in 2006 have likely also decreased.

It should also be noted that increases in slide movement could occur due to other factors such as above average precipitation and changes in the moisture conditions in the hillside that are entirely unrelated to the mining activities.

4. RECOMMENDATIONS

It is apparent from the data collected that mining activities in West Ridge Mine have caused mining-induced seismic events, and that ground motions caused by these events are detectable at Grassy Trail Dam and Reservoir. These ground motions have caused some measurable permanent deformations of the ground surface on the hillside west of the reservoir, as well as lateral deformations at the west end of the dam. Despite the recorded deformations, the dam appears to be performing well, and ongoing deformations have been very small to negligible since mining of Panel 7 concluded in the fall of 2006.

The inclinometers suggest that since October 2006 negligible to only very slight deformations (creep) may be ongoing at the dam's west abutment. Continued monitoring of these inclinometers is recommended to verify that the rate of this movement does not increase. Inclinometer #4 was damaged and then buried by a surficial landslide. This slide was triggered by a road cut made to widen the roadway along the west side of the dam.

Regular monitoring of piezometers and seepage collection points is also recommended to verify that the recorded lateral movements do not result in increased seepage and/or internal erosion of the dam. This monitoring is critical to ensure adequate long-term performance of the dam and the safety of people and facilities located downstream.

A meeting was held in May 2010 to discuss the ongoing and future mining operation. As mining continues toward the east, it is gradually approaching closer to the area north of the reservoir. Due to the changes in mining practice to a "Barrier and Panel" configuration after February 2009, MIS events have dropped significantly in number and in magnitude. Based on this decrease, mining of panels # 18, 19 and 20 appears to be significantly safer, relative to dam safety. These areas are now being considered for mining. According to Figure 3, a small portion, about 300 feet wide, along the west side of Panel 18 may begin around in the Fall of 2010.

We recommend that the Minimate seismic monitoring accelerometer located on the hillside west of the dam be relocated to a location north of the dam. The instrument should be placed at a distance about equal to the nearest distance that projected mining is shown at its closest point to the dam. By doing this, we can start gathering new PGA (accelerometer) data relative to the new mining practices. This data can then be compared with data gathered during mining of Panels #6 and #7 in 2005 and 2006.

We recommend the monitoring schedule prepared and discussed in the Grassy Trail Dam and Reservoir, Mining-Induced, Summary Report, January 2008, included as Exhibit E-2 in Appendix E of that report, continue until further notice. A copy of Exhibit E-2 is included in the Appendix of this report. It is anticipated that the parties involved will meet yearly while mining continues, in order to review the monitoring data and update the monitoring schedule as needed. The frequency of monitoring may be increased at any time as dictated by unexpected changes in the monitoring data. We expect that monitoring will increase as mining gets closer to the reservoir.

As noted in Exhibit E-2, we will continue to perform daily reviews of the data on the UUSS web site. If an event of magnitude greater than 3.0 is reported within 5 miles of the dam, thorough site

reconnaissance and readings of the ground motion instruments will be performed within 24 hours. Reading of all other instrumentation (inclinometers and piezometers) will also be performed if any recorded ground acceleration exceeds 0.2g.

REFERENCES

Agapito Associates, Inc. (2004), Estimated Impacts to the Grassy Trail Reservoir Due to Longwall Mining, West Ridge Mine, November 2004.

McGarr, A. and J.B. Fletcher (2005). Development of ground motion prediction equations relevant to shallow mining-induced seismicity in the Trail Mountain Area, Emery County, Utah, *Bull. Seismol. Soc. Am.*, Vol. 95, No. 1, pp. 31-47, February 2005.

Arabasz, W.J., J. Ake, M.K. McCarter and A. McGarr (2002). Mining-induced seismicity near Joes Valley Dam: summary of ground-motion studies and assessment of probable maximum magnitude, Technical Report, University of Utah Seismograph Stations, Salt Lake City, Utah, Accessible online at www.seis.utah.edu/Reports/sitla2002b.

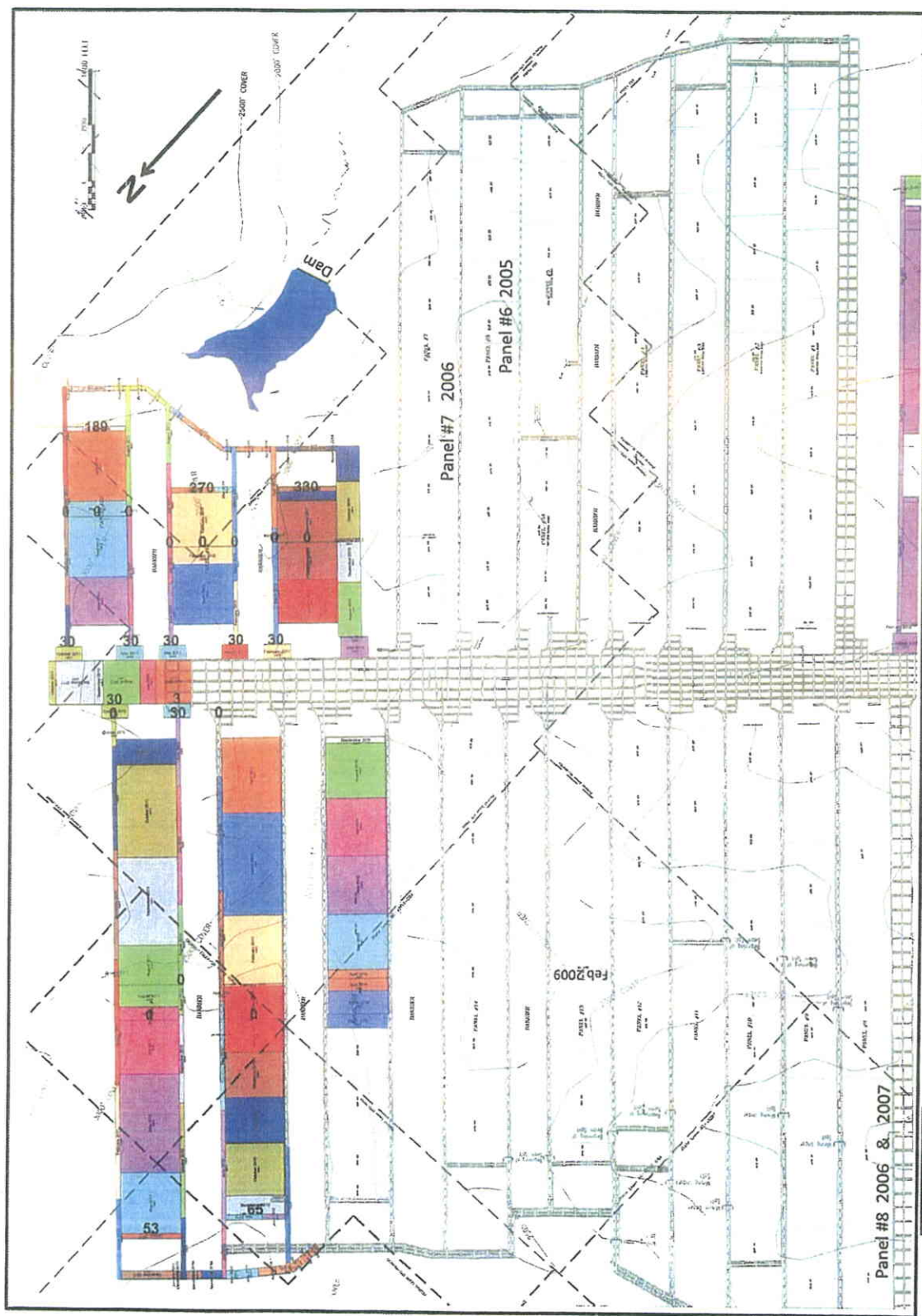
Arabasz, W.J., S.J. Nava, M.K. McCarter, K.L. Pankow, J.C. Pechmann, J. Ake, and A. McGarr (2005). Coal-mining seismicity and ground-shaking hazard: a case study in the trail mountain area, Emery County, Utah, *Bull. Seismol. Soc. Am.*, Vol. 95, No. 1, pp. 18-30, February 2005.

Arabasz, W.J. and R. Burlacu (2004). Memorandum to RB&G Engineering in response to request for additional seismic information, University of Utah Seismograph Stations, Salt Lake City, Utah, September 23, 2004.

RB&G Engineering, Inc. (2005). Mining-Induced Seismicity Near Grassy Trail Dam and Reservoir.

RB&G Engineering, Inc. (2008). Grassy Trail Dam and Reservoir, Mining-Induced Seismicity, Summary Report January 2008.

Figures & Tables



**West Ridge Mine Project Area
Grassy Trail Reservoir Mining Induced Seismicity
Near East Carbon, Carbon County, Utah**

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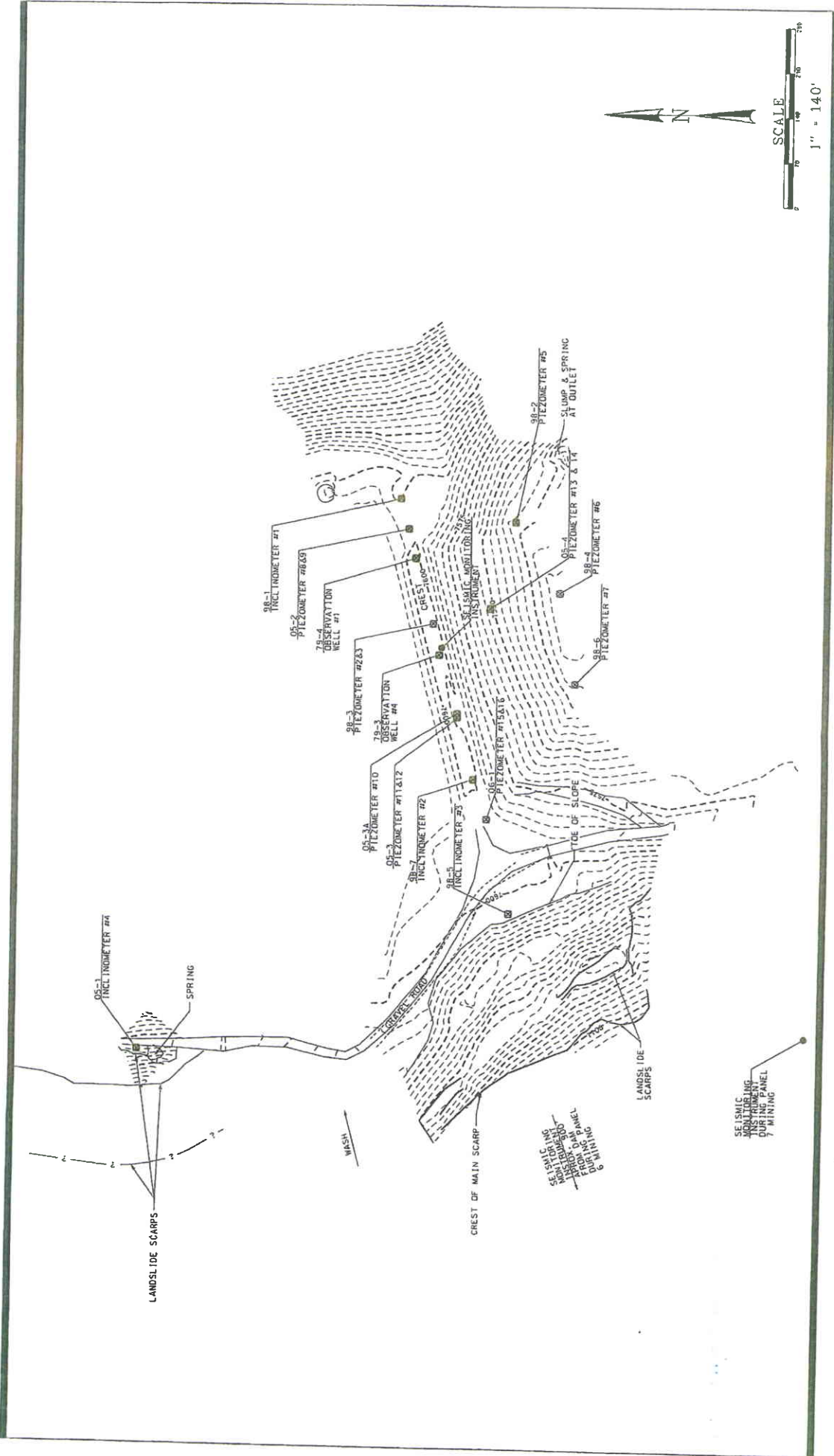
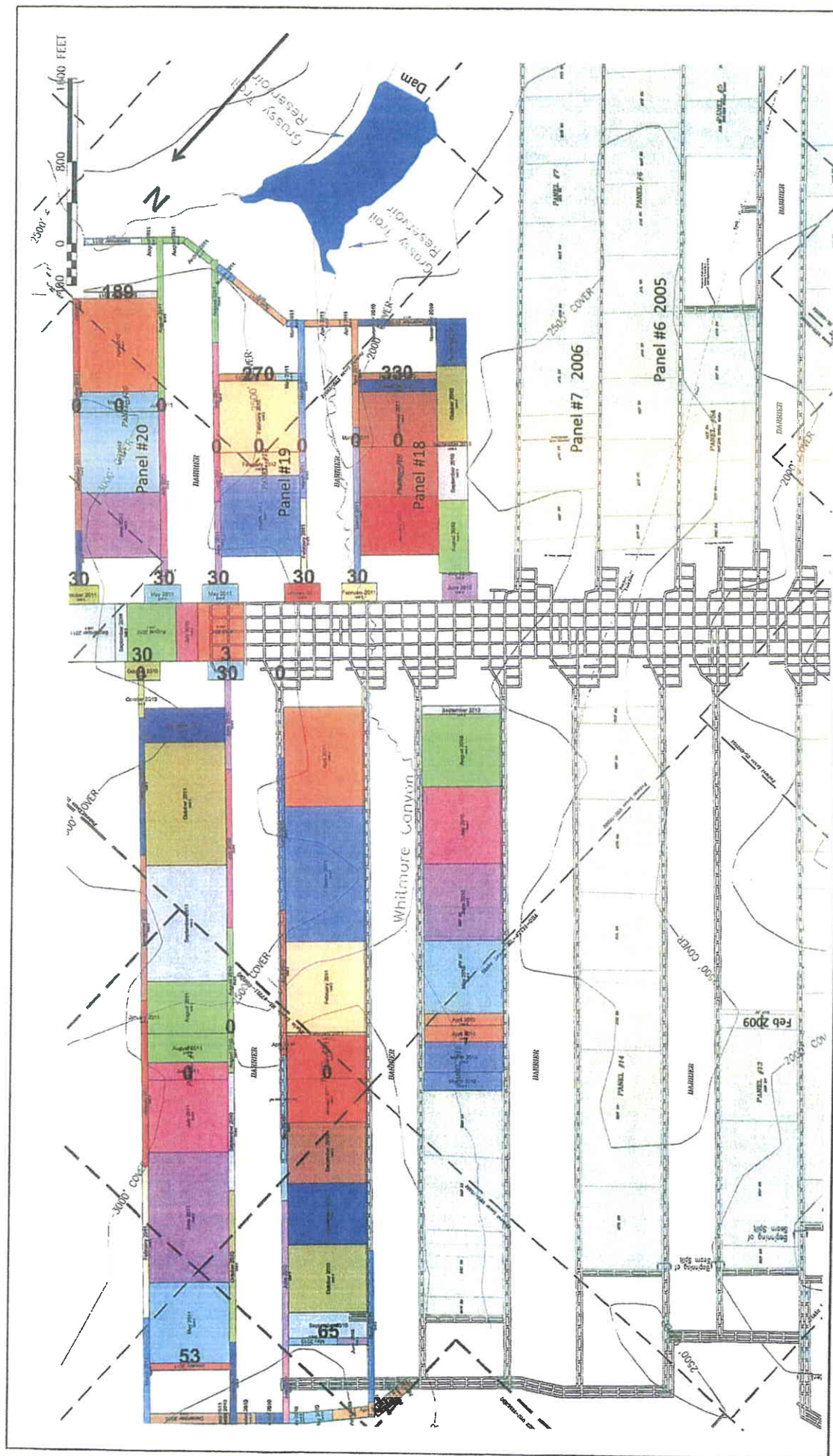


Figure 2

LOCATION OF INSTRUMENTATION

GRASSY TRAIL DAM
CARBON COUNTY, UTAH



RB&G
ENGINEERING, INC.

Figure 3
Project
Location

West Ridge Mine Project Area with projected Mining Dates
Grassy Trail Reservoir Mining Induced Seismicity
Near East Carbon, Carbon County, Utah

Ground Motion Monitoring Devices

Table A-1
Monthly Summary of Ground Motions
Jan 2008 to July 2010
Grassy Trail Dam

Month	Device on Dam			Device on Hillside			UUSS Earthquakes	
	No. of Events	Max Per Day	Max Accel. (g)	No. of Events	Max Per Day	Max Accel. (g)	No. of Events	Max Magnitude
Jan 2008	8	1	0.0265	na	removed for repair		45	2.5
Feb 2008	0			1	1	0.0265	23	1.8
Mar 2008	0			0			13	2.0
Apr 2008	0			0			25	2.0
May 2008	0			0			20	2.1
Jun 2008	1	1	0.0265	0			6	1.5
Jul 2008	0			0			1	1.2
Aug 2008	0			0			37	2.1
Sep 2008	0			0			8	1.6
Oct 2008	0			0			32	2.1
Nov 2008	1	1	0.0133	0			8	1.7
Dec 2008	0			0			34	1.8
Jan 2009	0			0			47	2.0
Feb 2009	0			0			3	2.1
Mar 2009	0			0			1	1.4
Apr 2009	0			0			1	1.1
May 2009	0			0			1	1.3
Jun 2009	0			0			2	1.4
Jul 2009	0			0			1	1.2
Aug 2009	0			0			3	1.3
Sep 2009	0			0			1	1.3
Oct 2009	0			0			1	0.6
Nov 2009	0			0			1	1.4
Dec 2009	0			0			0	
Jan 2010	0			0			0	
Feb 2010	0			0			0	
Mar 2010	0			0			1	0.1
Apr 2010	0			0			0	
May 2010	0			0			0	
Jun 2010	0			0			0	
Jul 2010	0			0			0	

Notes: Max. Accel. = Maximum Peak Acceleration Recorded During the Month

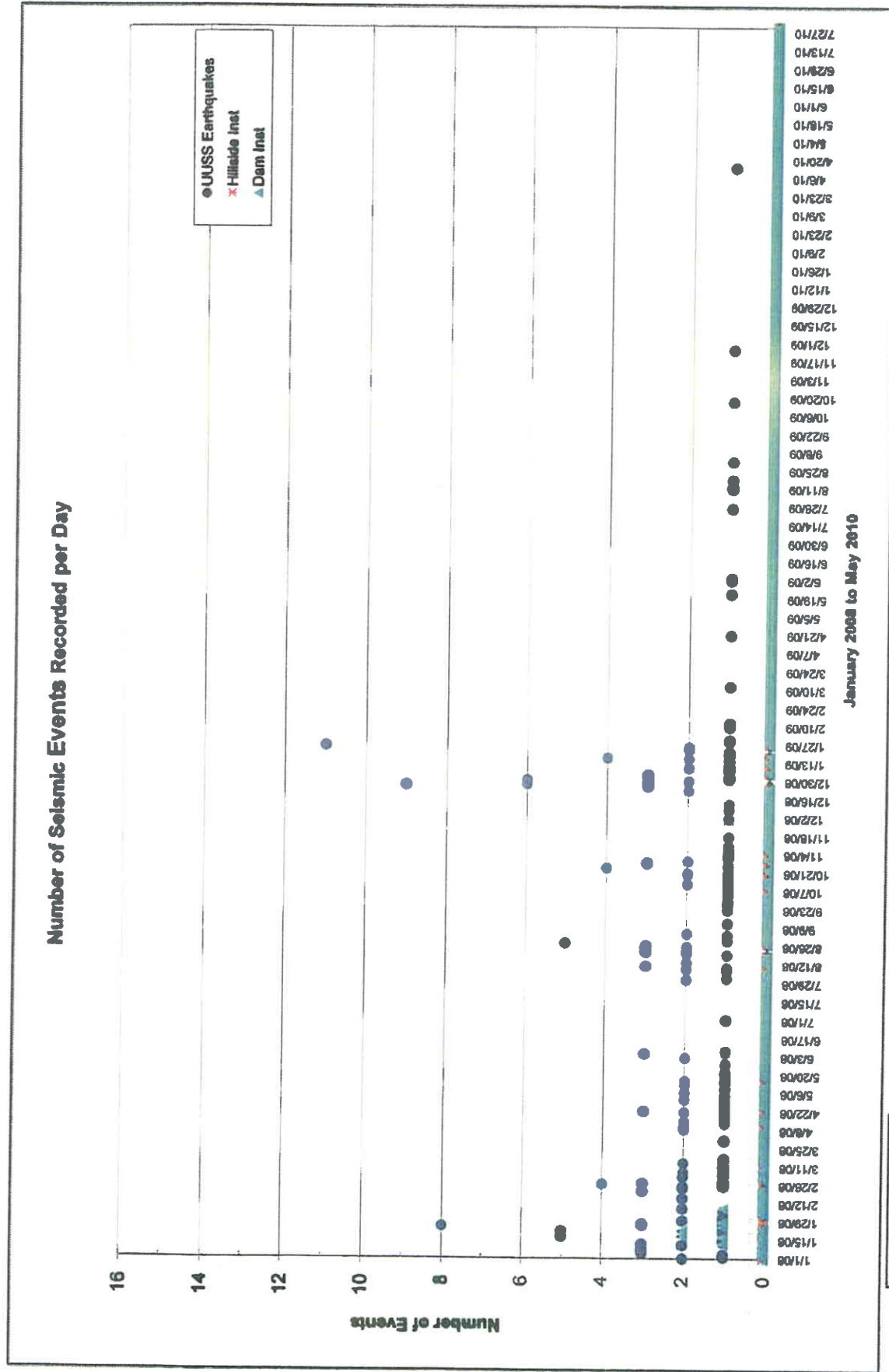


Figure A-1
NUMBER OF EVENTS RECORDED PER DAY (SINCE JAN 1 2008)
 GRASSY TRAIL DAM - CARBON COUNTY, UTAH



Number of Seismic Events Recorded per Day

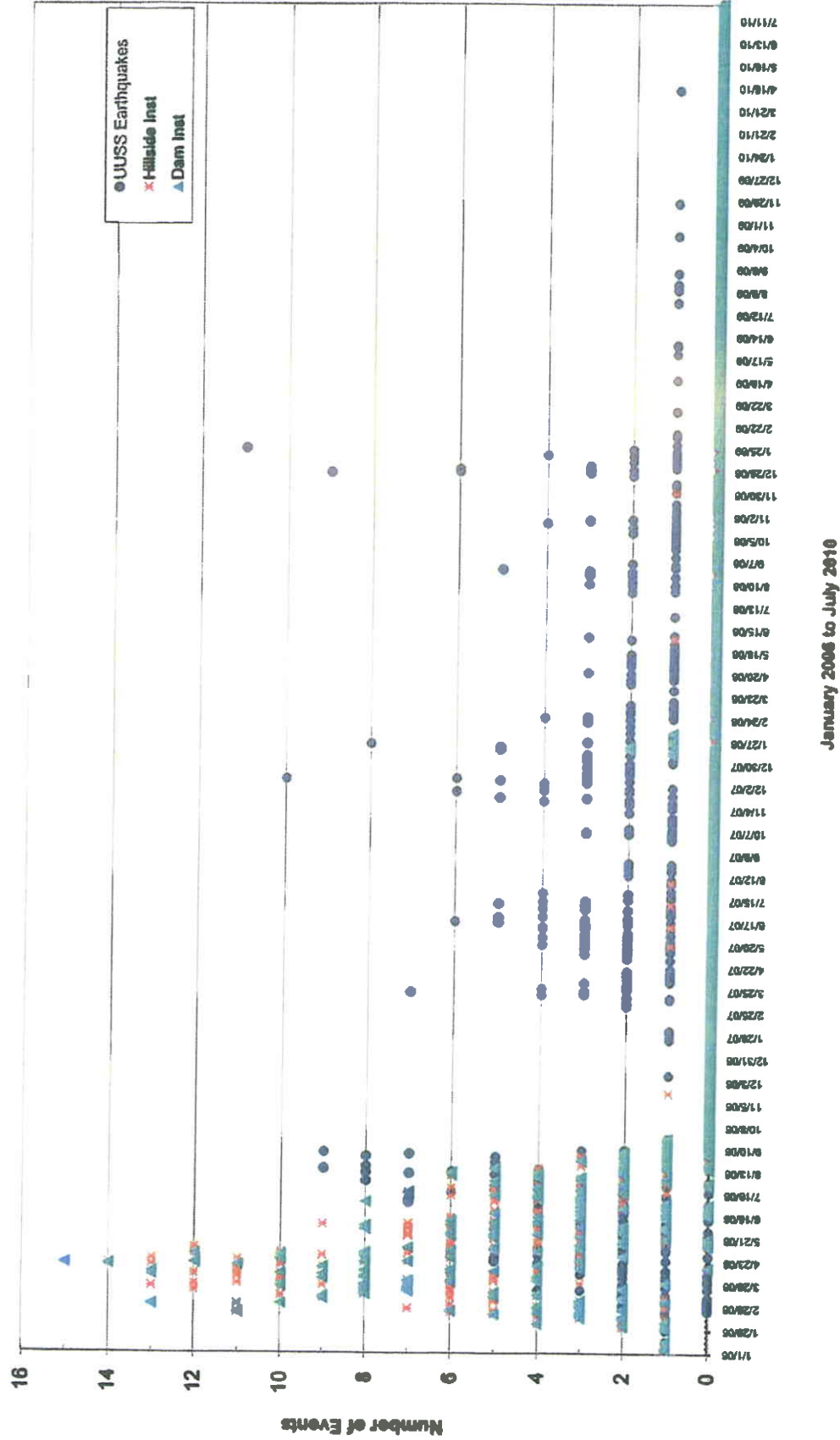


Figure A-1 a
 NUMBER OF EVENTS RECORDED PER DAY (SINCE JAN 1 2006)
 GRASSY TRAIL DAM - CARBON COUNTY, UTAH

Selismic Events per Seven day Period

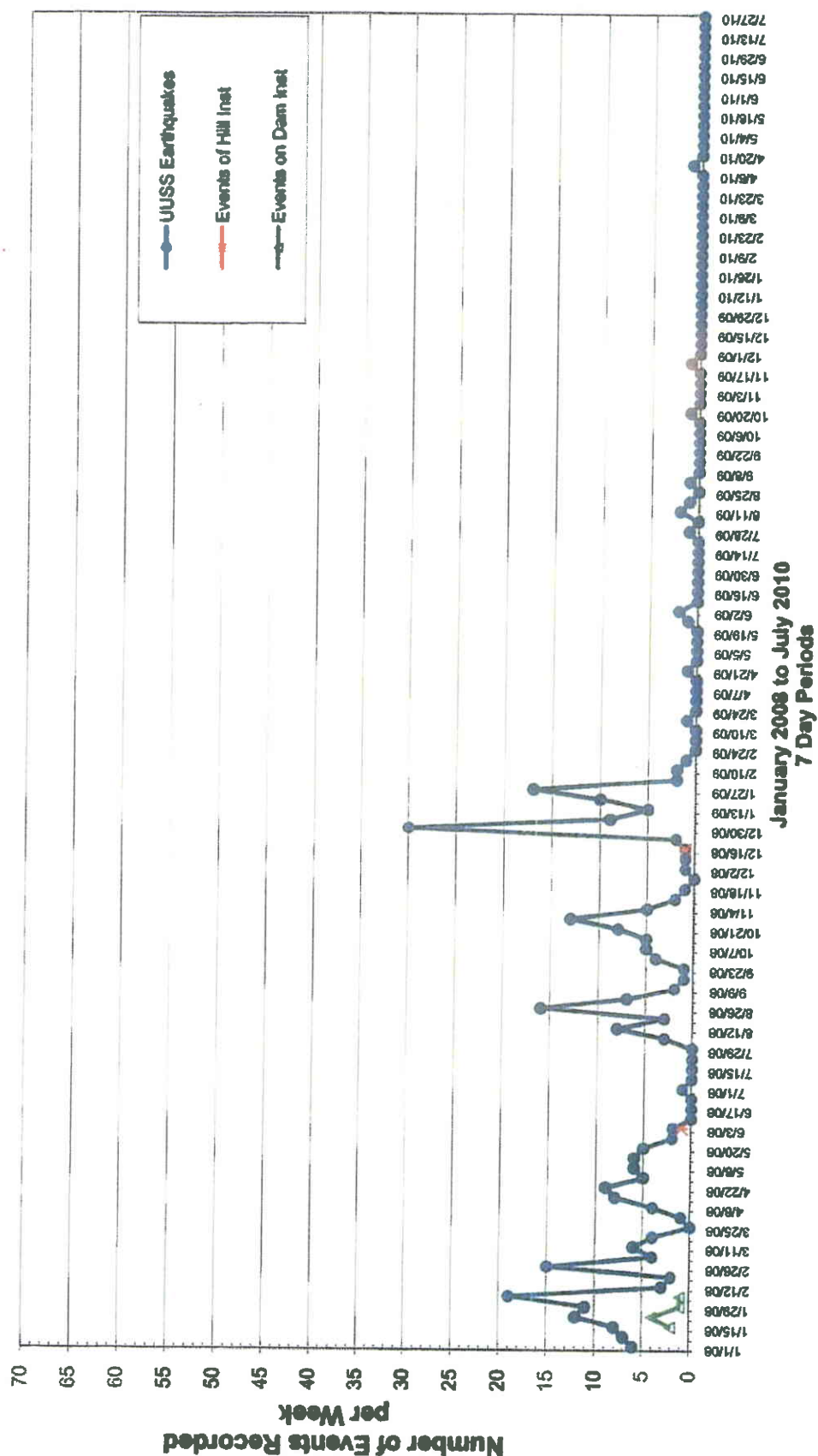
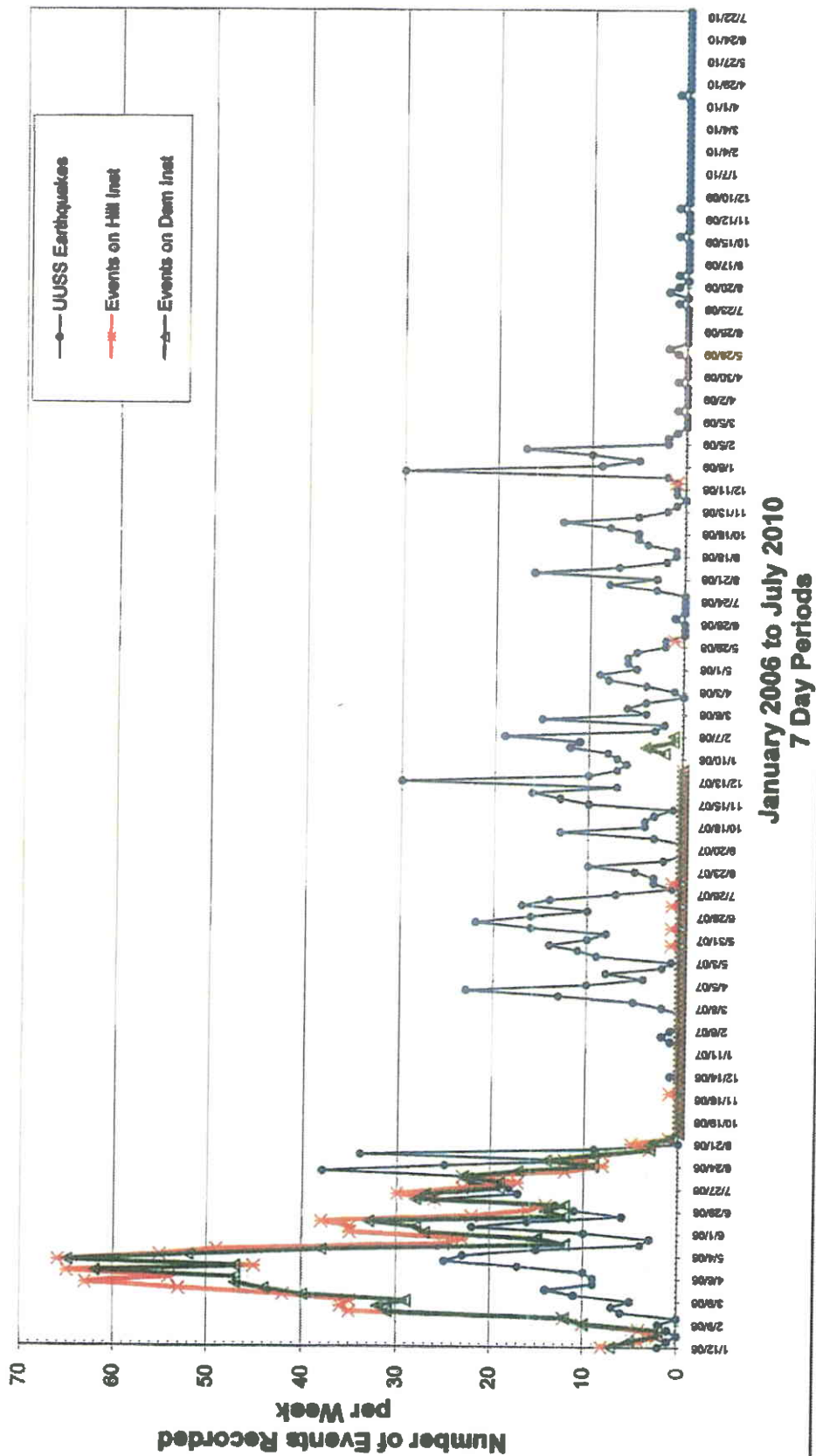
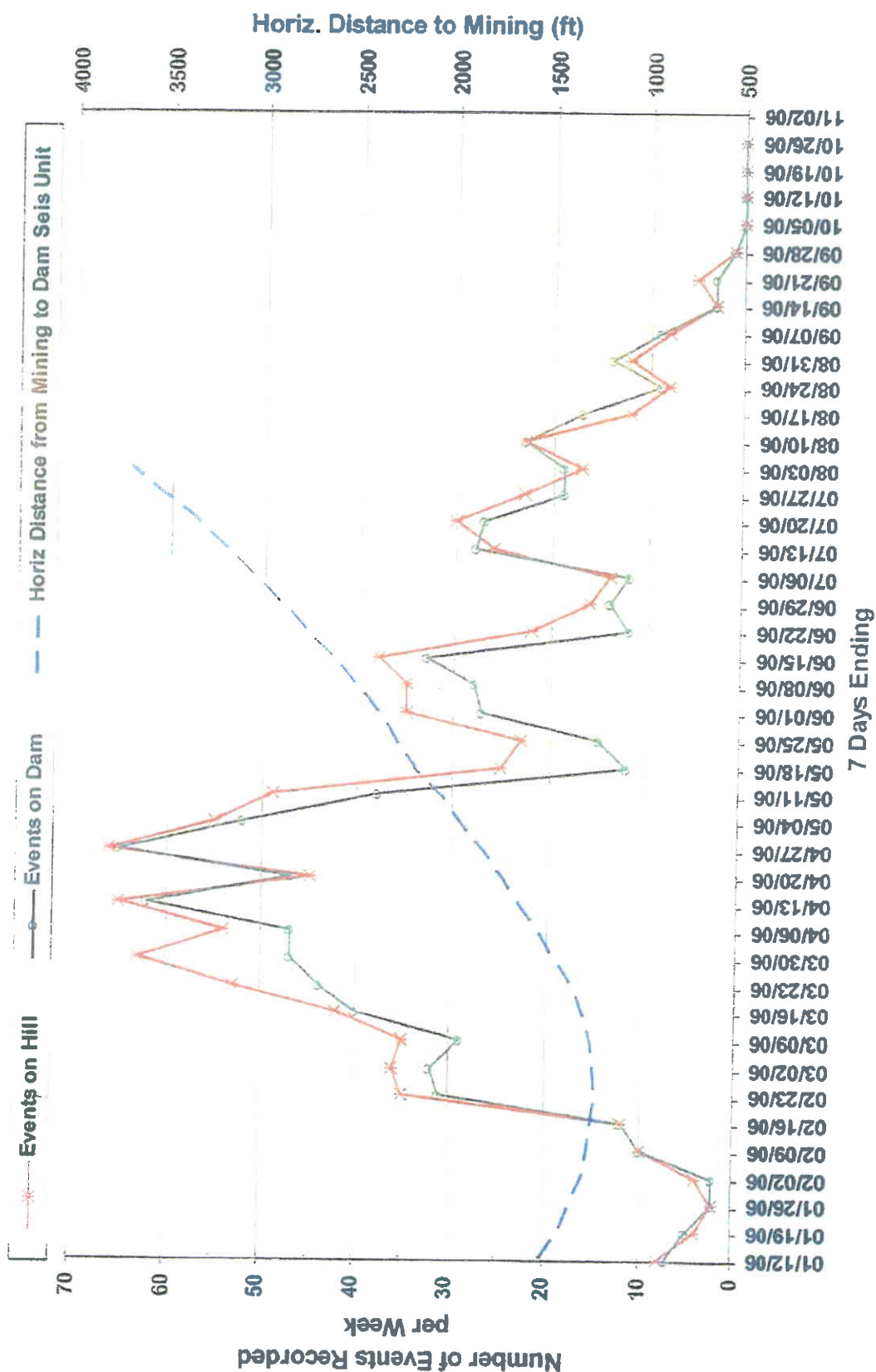


Figure A-2
NUMBER OF EVENTS RECORDED PER WEEK (SINCE JAN 1 2008)
GRASSY TRAIL DAM - CARBON COUNTY, UTAH

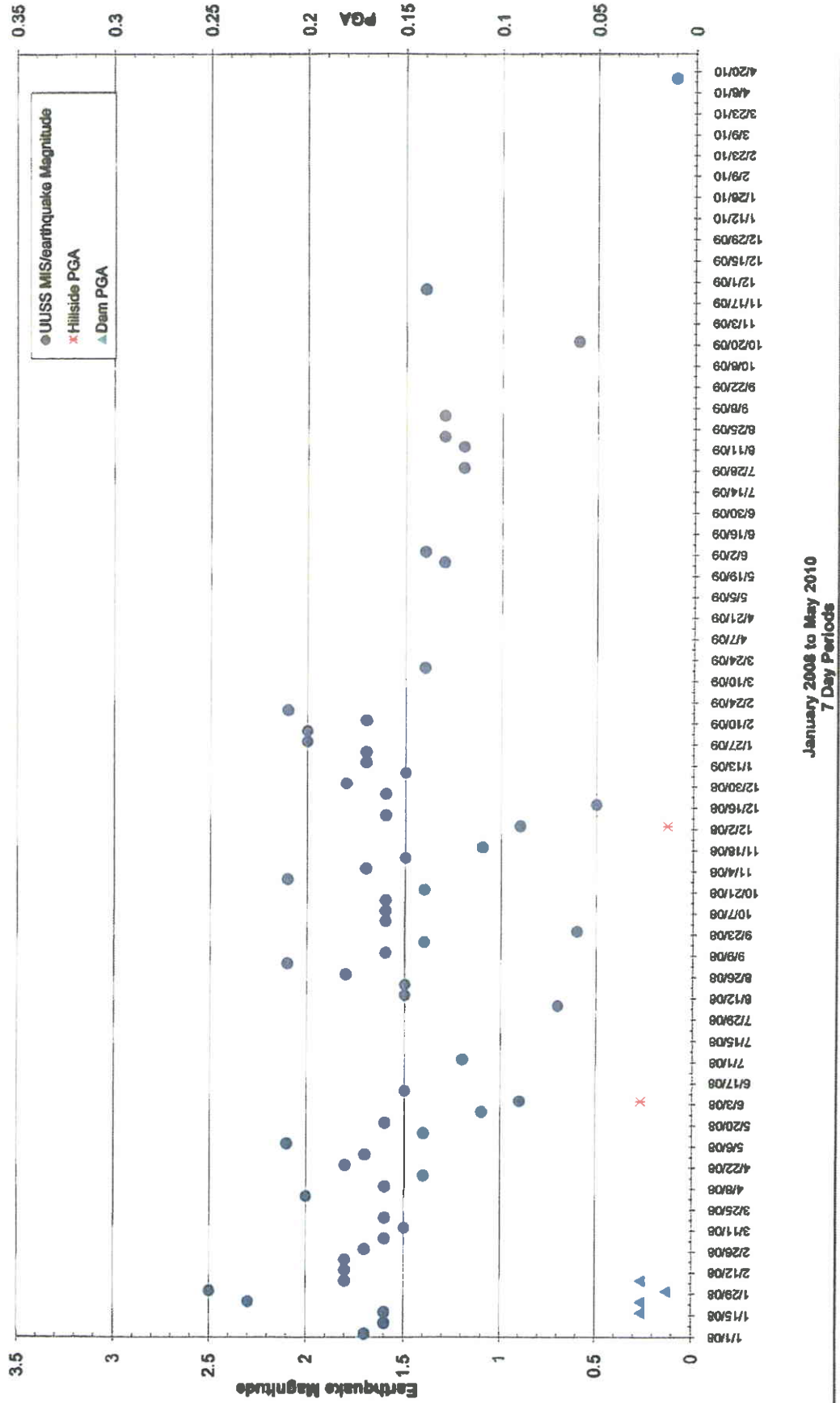
Seismic Events per Seven day Period



Seismic Events per Seven day Period



Maximum MIS/Earthquake Magnitude & PGA Per Seven Day Period



January 2008 to May 2010
7 Day Periods

Figure A-4
PEAK GROUND ACCELERATIONS AND MIS/EARTHQUAKE MAGNITUDES versus TIME
GRASSY TRAIL DAM - CARBON COUNTY, UTAH



Maximum MIS/Earthquake Magnitude & PGA Per Seven Day Period

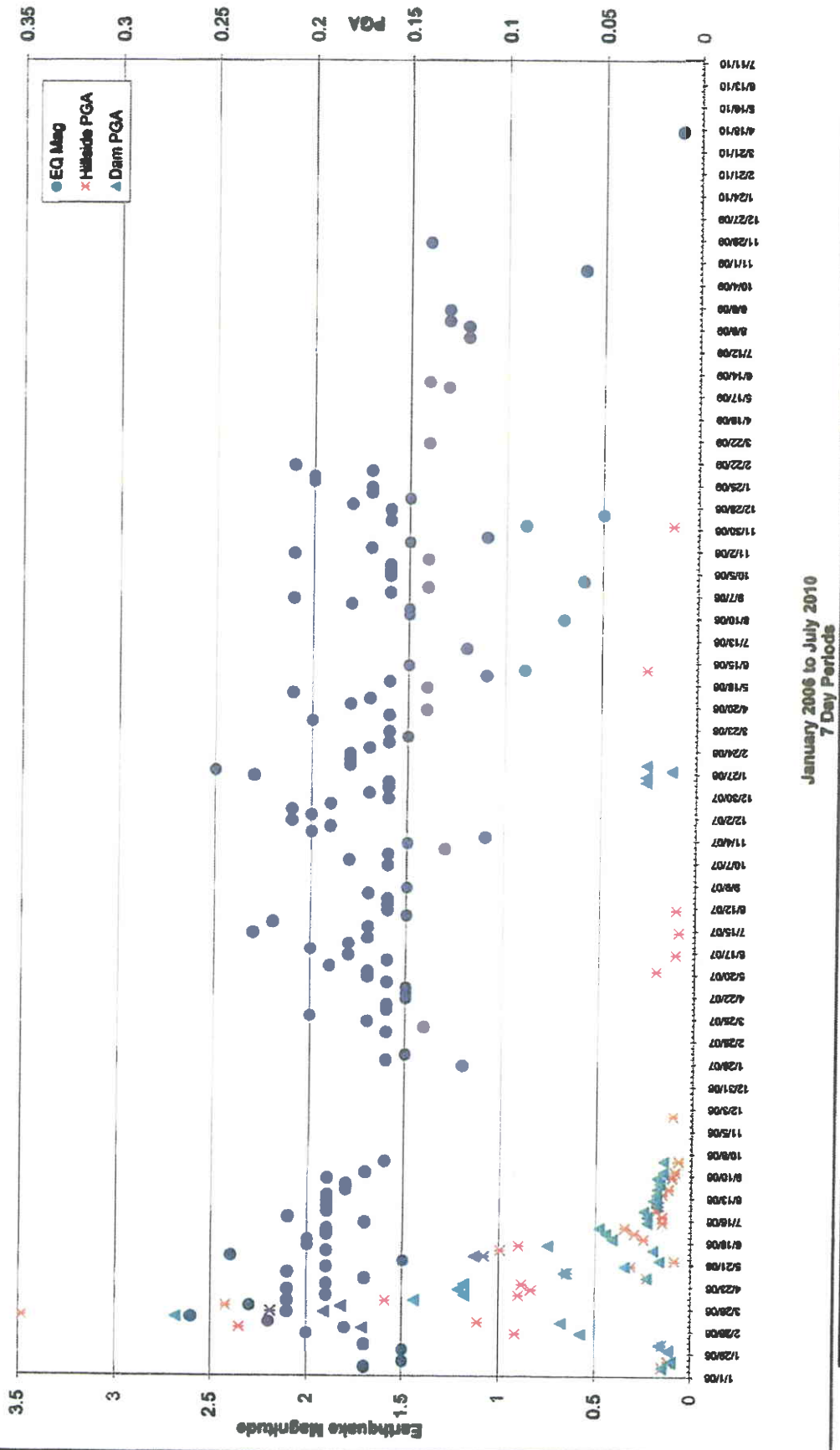


Figure A-4 a
PEAK GROUND ACCELERATIONS AND MIS/EARTHQUAKE MAGNITUDES versus TIME
 GRASSY TRAIL DAM - CARBON COUNTY, UTAH



UUSS Earthquakes per Month **West Ridge Mine Near Grassy Trail Dam** Jan 2006 - July 2010

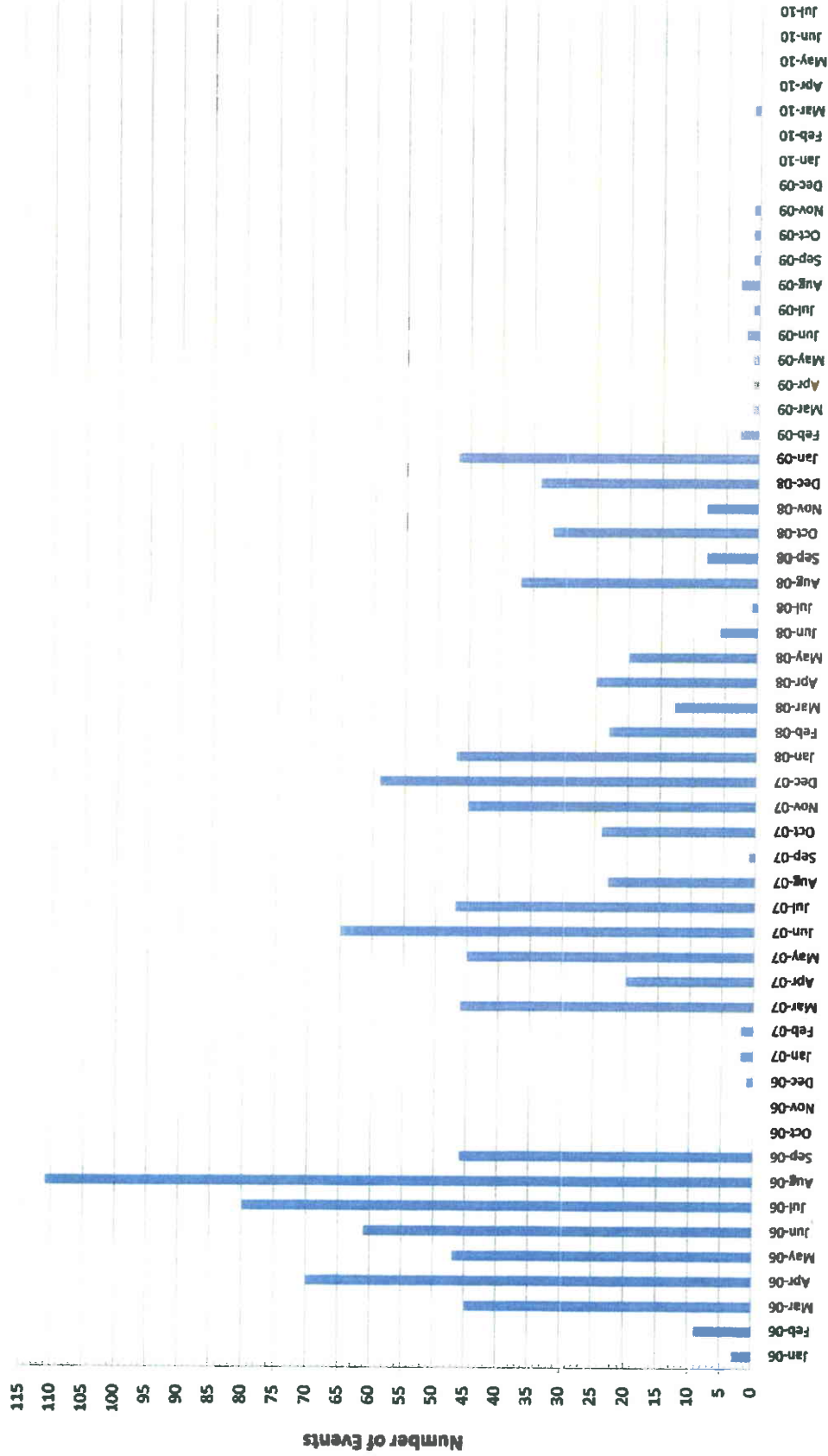


Figure A-5
NUMBER OF UUSS MISEARTHQUAKE EVENTS PER MONTH (SINCE JAN 1 2006)
 GRASSY TRAIL DAM - CARBON COUNTY, UTAH

Daily Earthquake Magnitudes JANUARY 2006 to July 2010

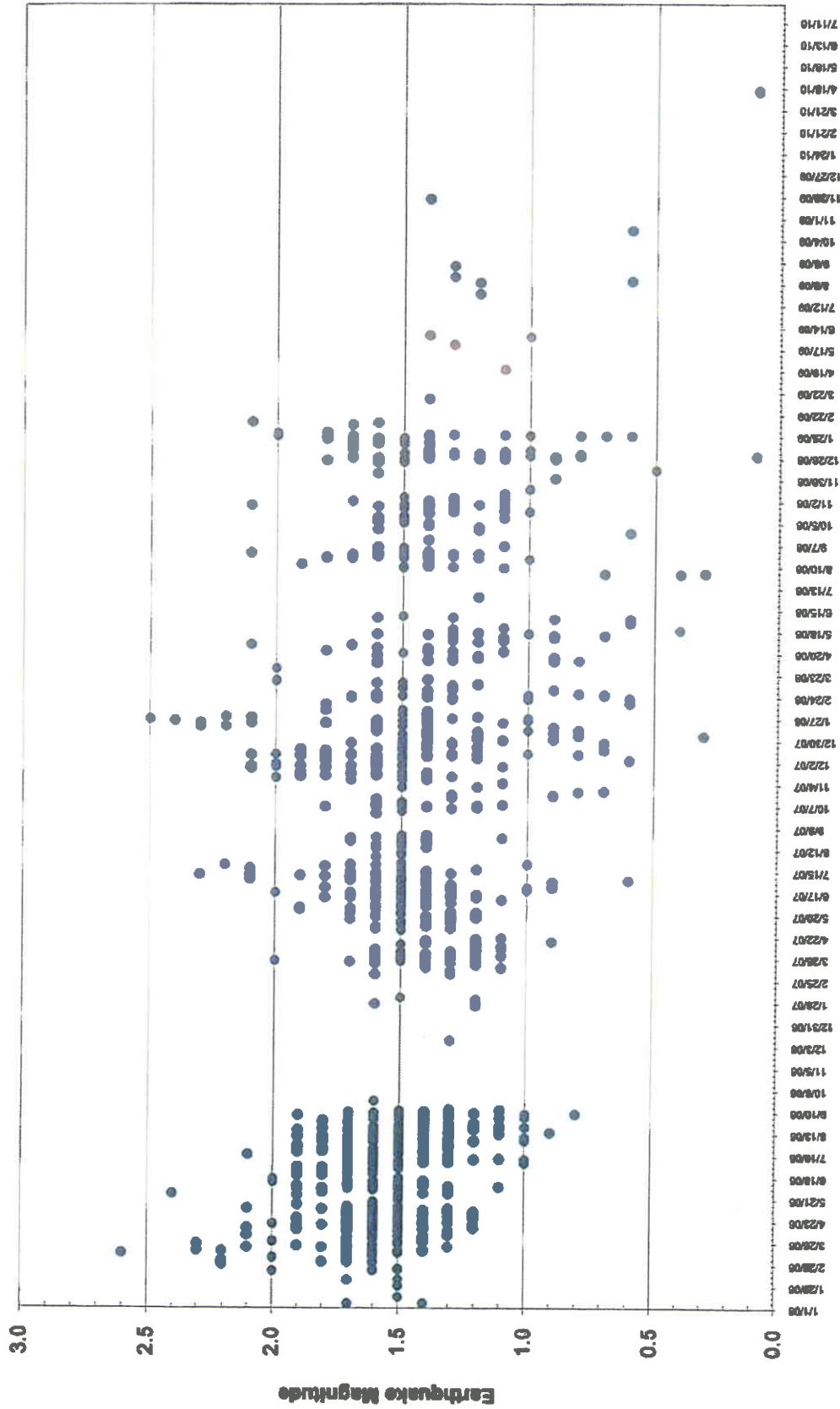
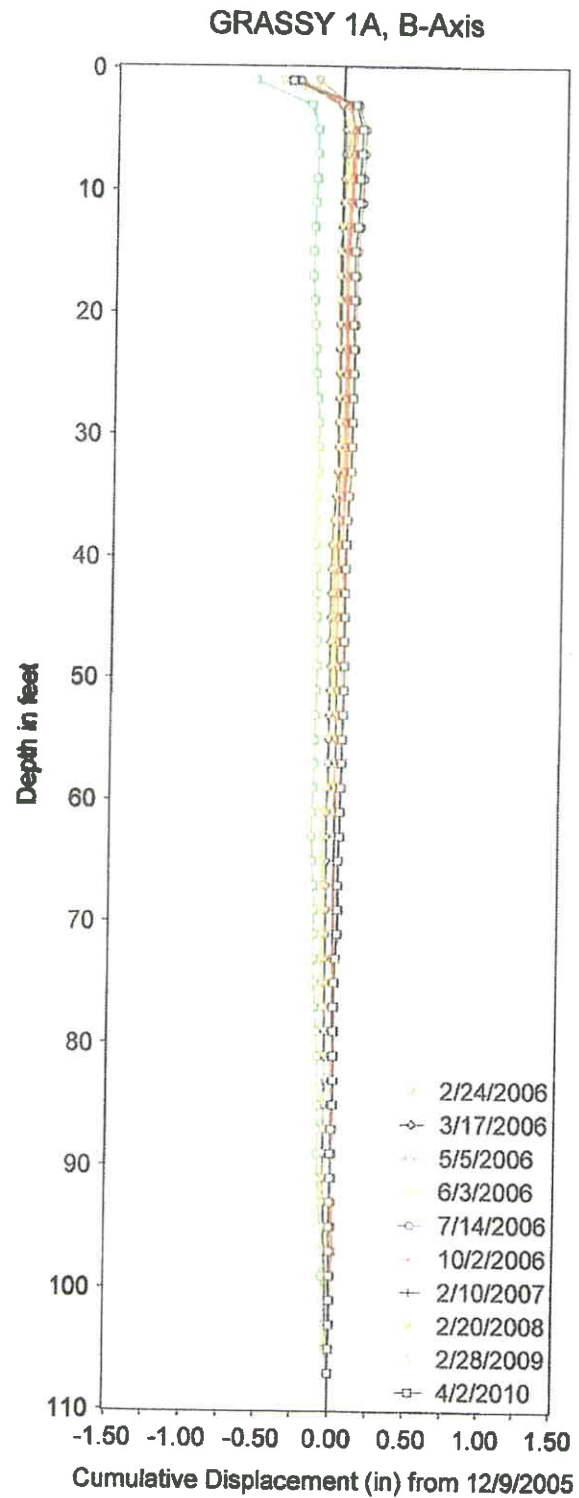
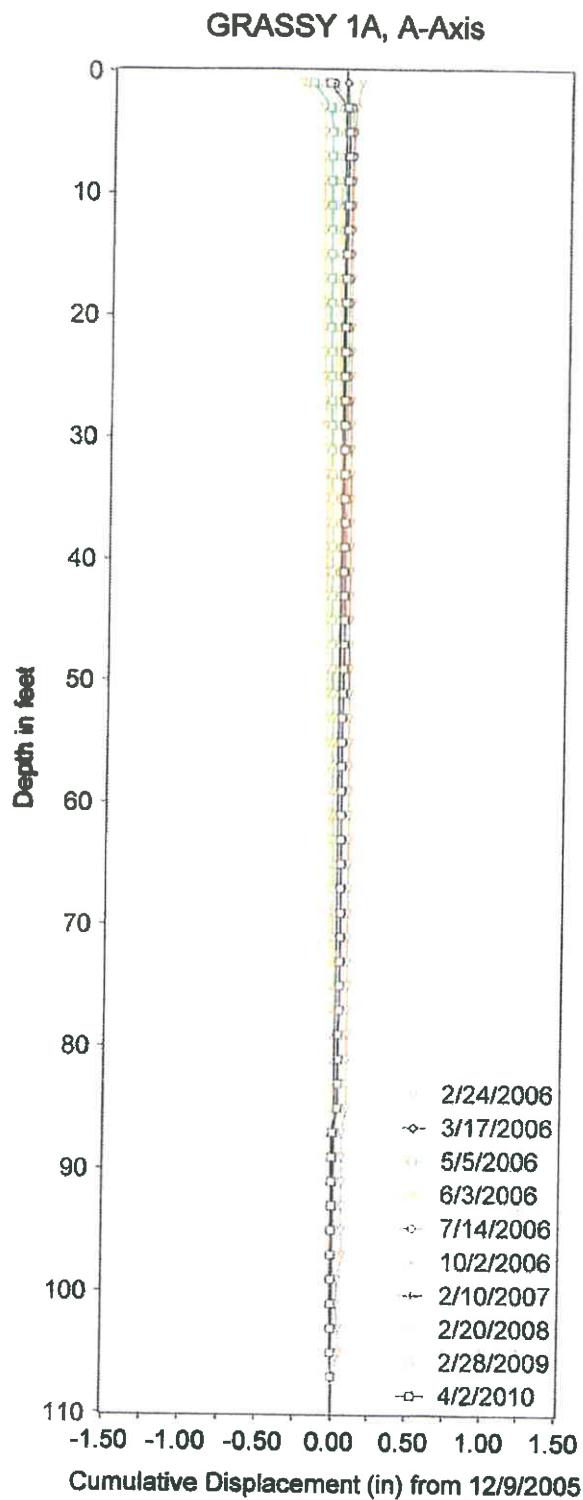


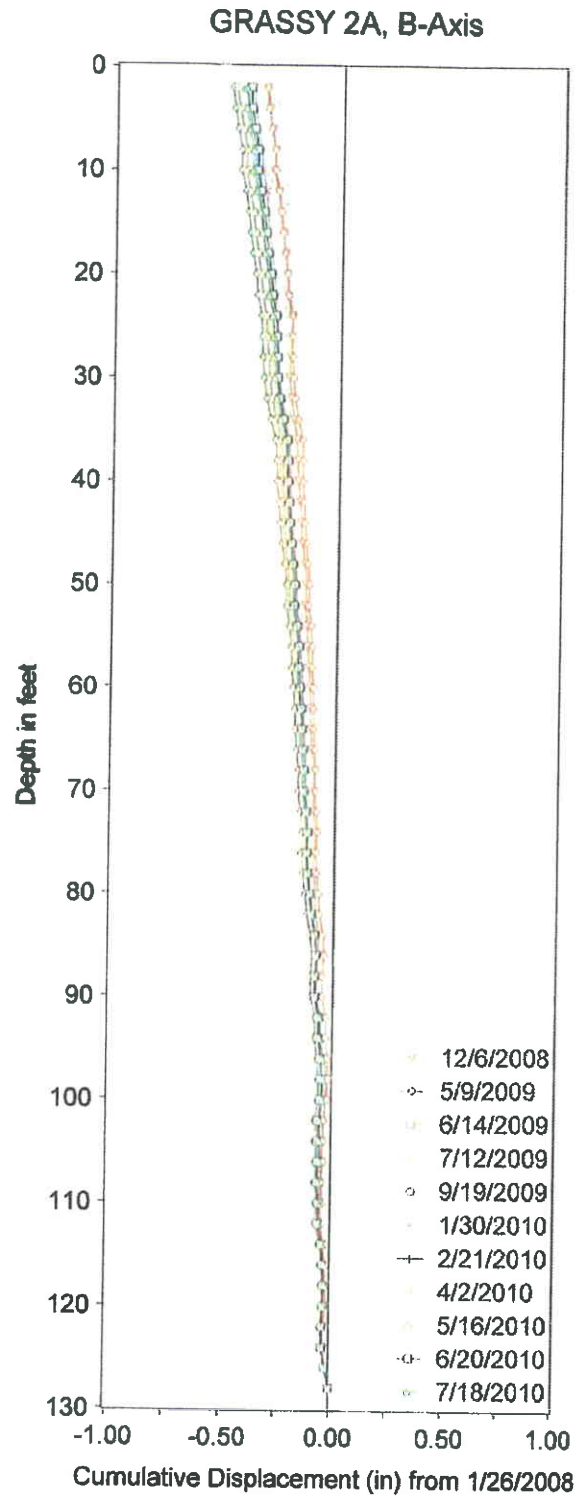
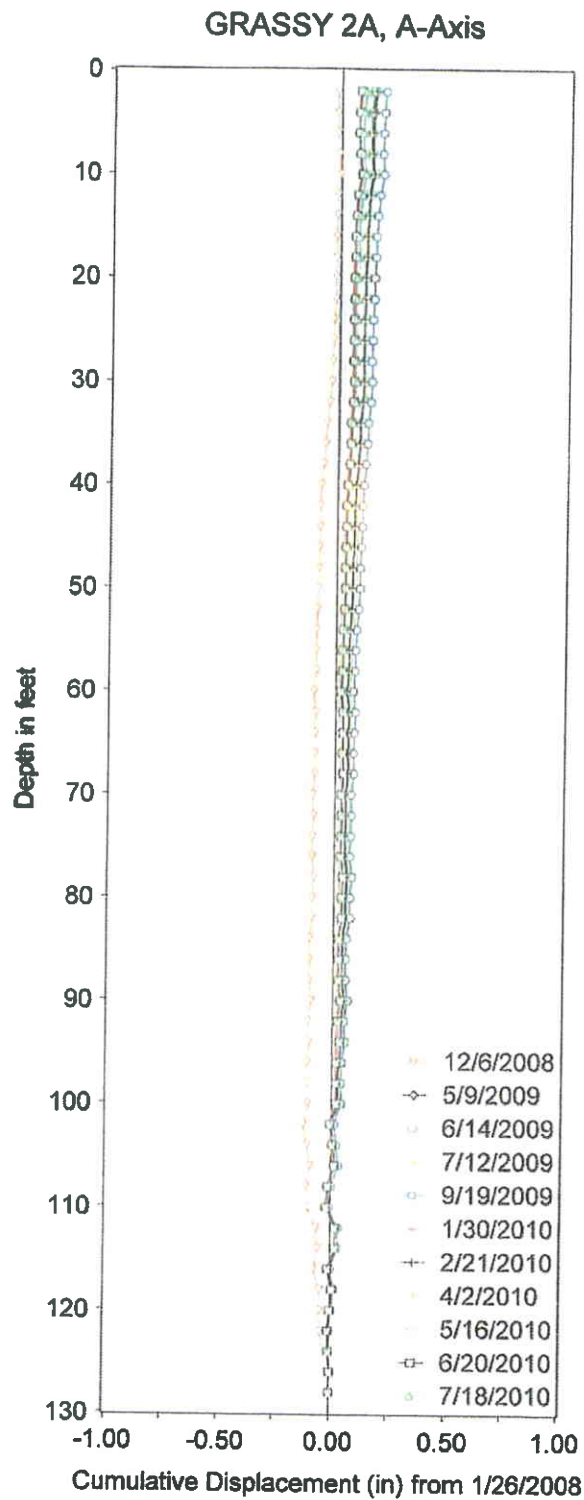
Figure A-6
 Daily Earthquake Magnitudes (SINCE JAN 1 2006)
 GRASSY TRAIL DAM - CARBON COUNTY, UTAH

Inclinometers



no significant movement observed

Figure B-1
Inclinometer 1 -Deflection Profiles
Grassy Trail Dam, Carbon County, Utah

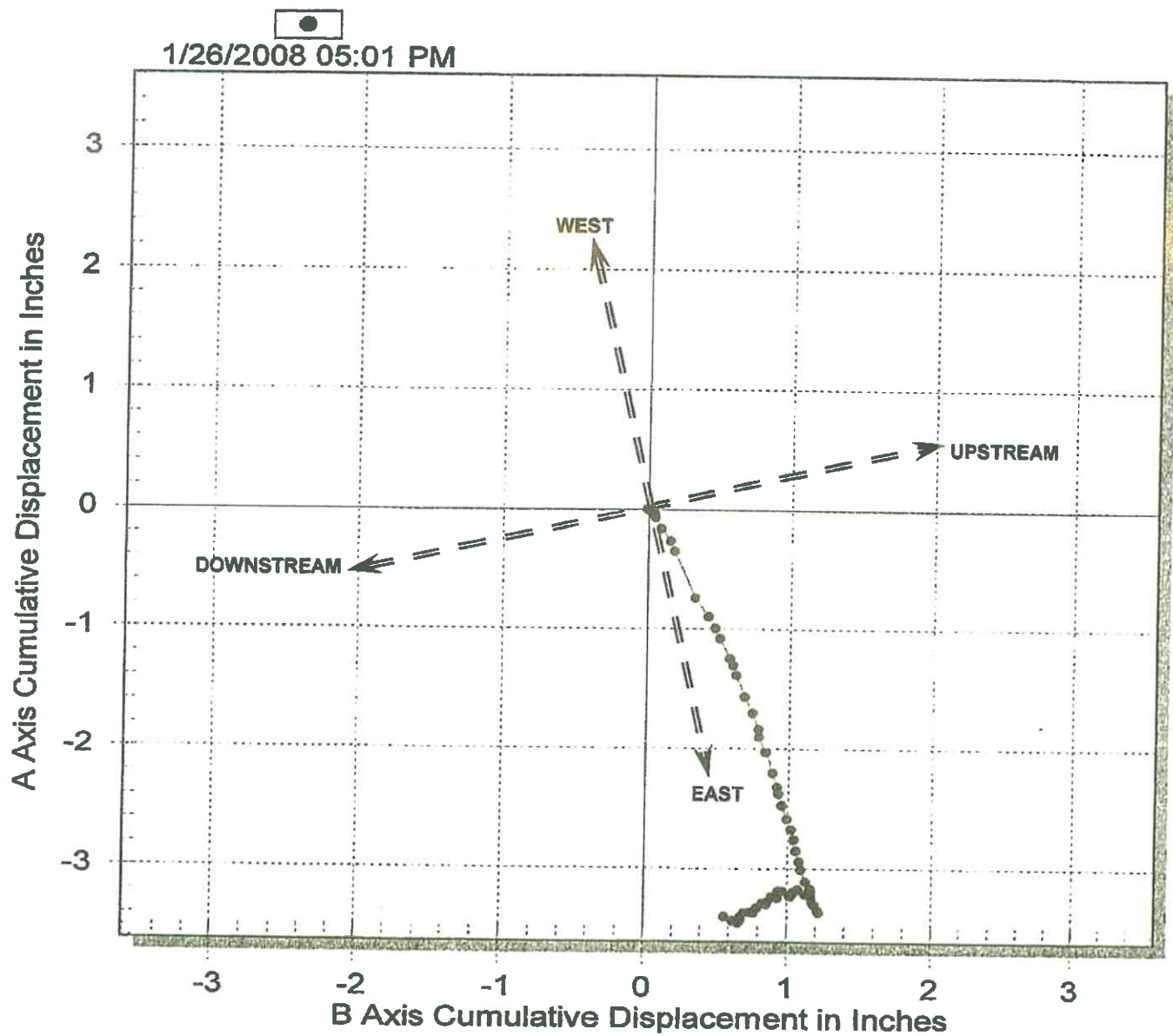


-15 degree skew
Bias-shift correction

Figure B-2
Inclinometer 2 - Deflection Profile
Grassy Trail Dam, Carbon County, Utah

GRASSY:2A - A Axis vs B Axis

Initial survey: 7/20/2004 09:33 AM



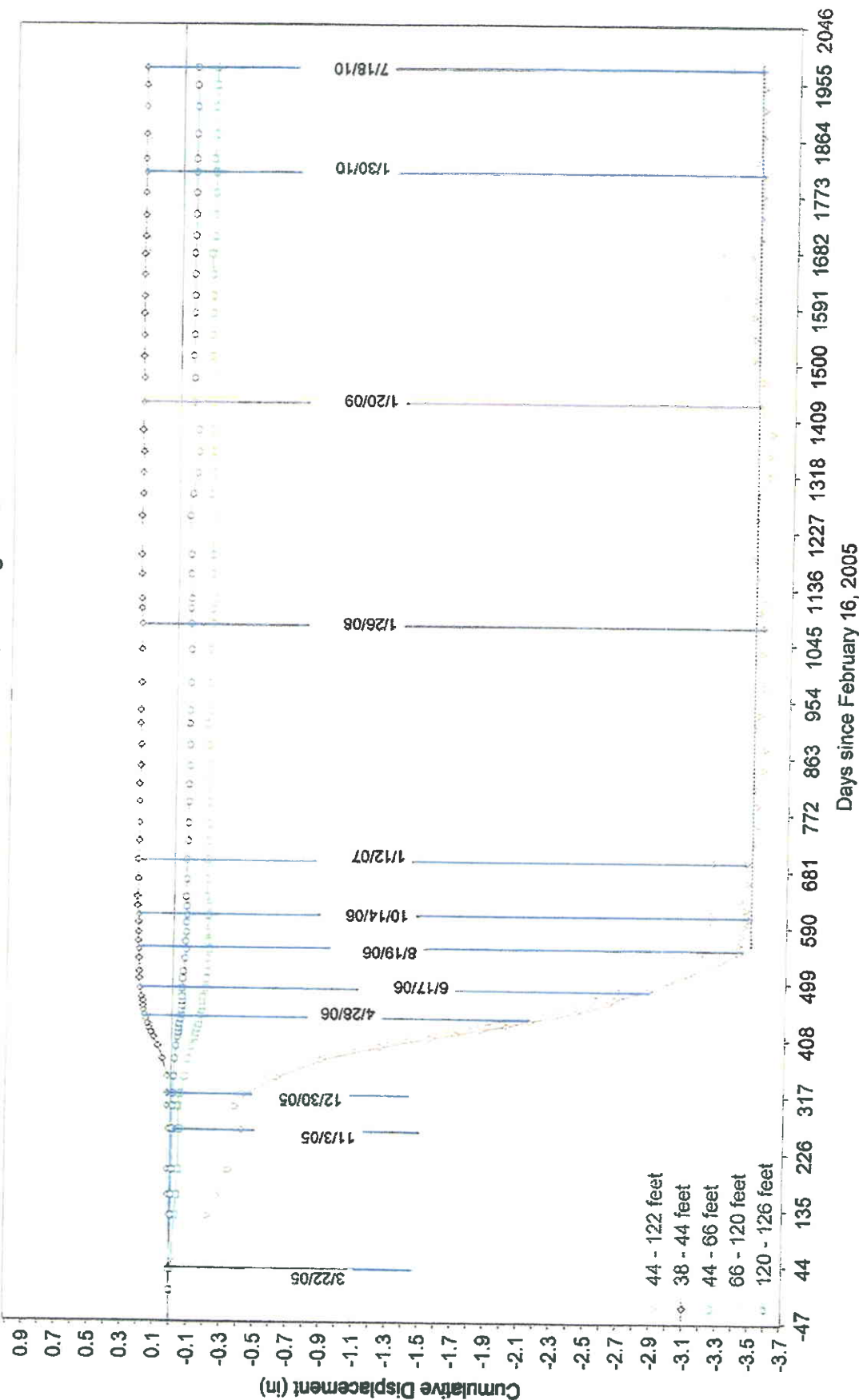
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INC.**

PROVO, UTAH

FIGURE B-3

**INCLINOMETER 2 - PLAN VIEW OF DEFLECTIONS
GRASSY TRAIL DAM AND RESERVOIR - CARBON COUNTY, UTAH**

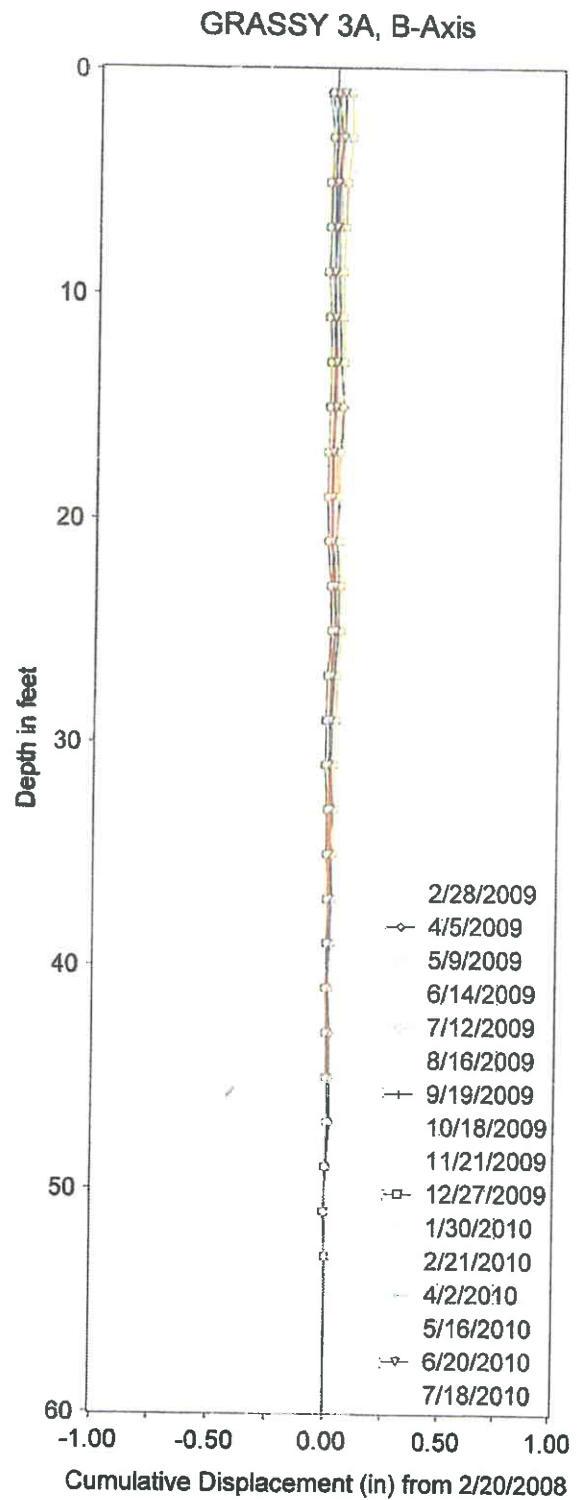
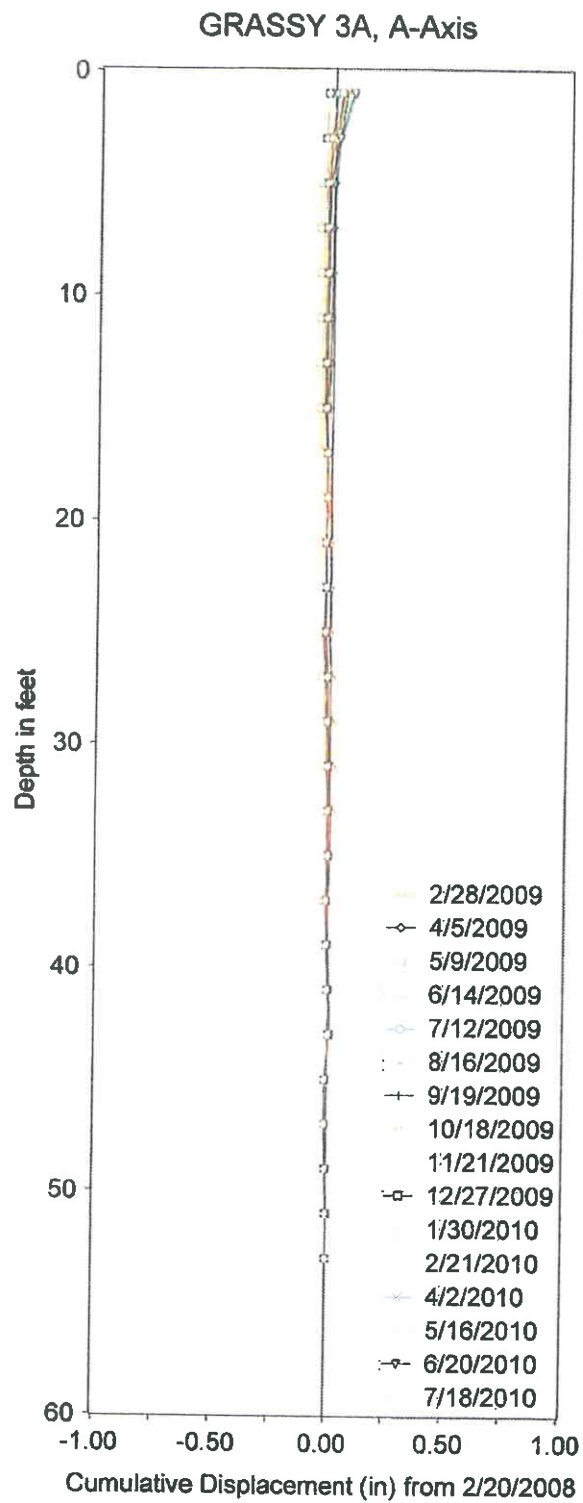
GRASSY 2A, A-Axis, -15 degree skew



Inclinometer I-2 Located on Dam 7/18/10
with -15 degree skew



Figure B-4
Inclinometer 2 - Deflection versus Time
Grassy Trail Dam, Carbon County, Utah

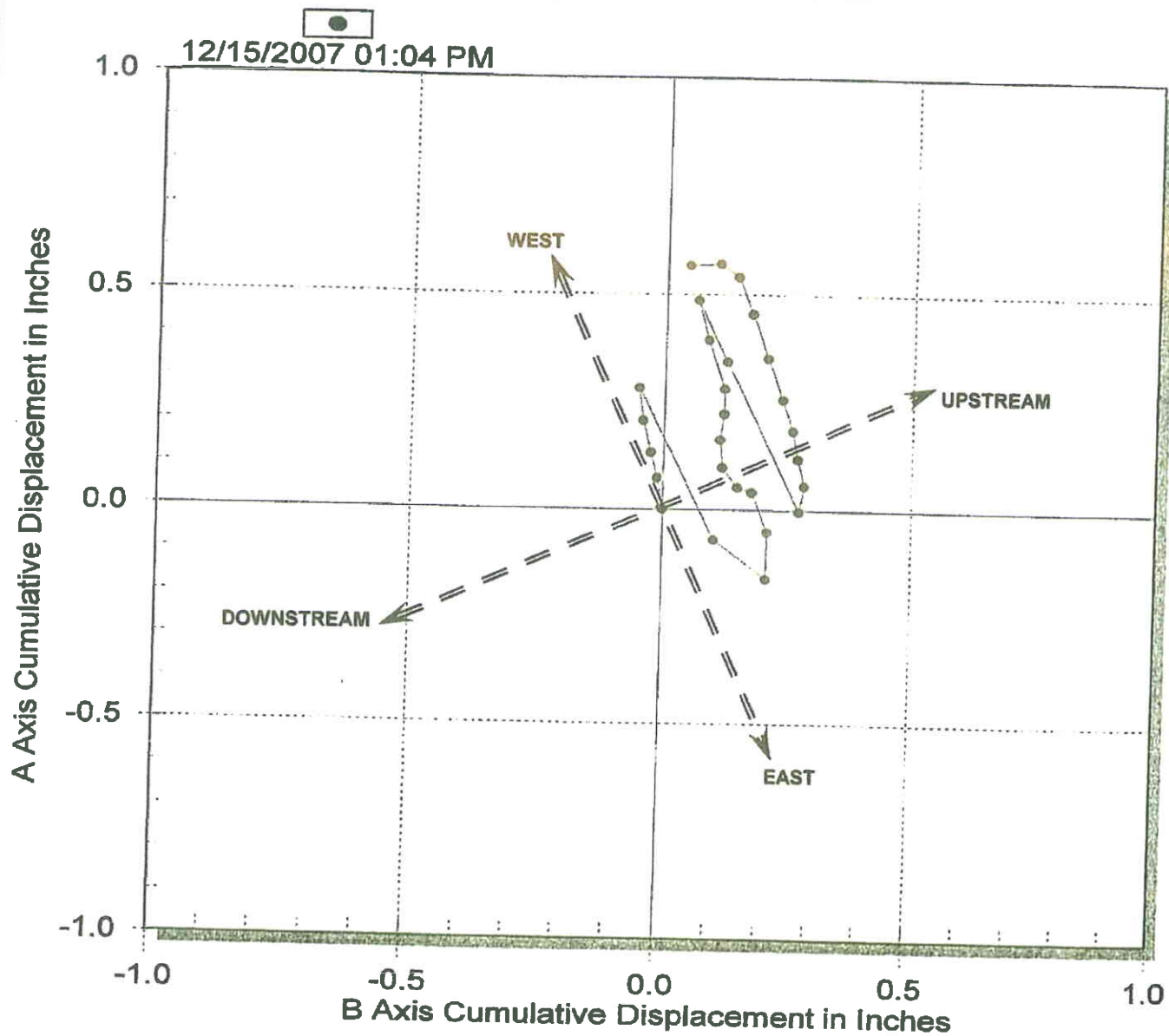


-30 degree skew

Figure B-5
Inclinometer 3 - Deflection Profile
Grassy Trail Dam, Carbon County, Utah

GRASSY:3A - A Axis vs B Axis

Initial survey: 7/20/2004 09:03 AM



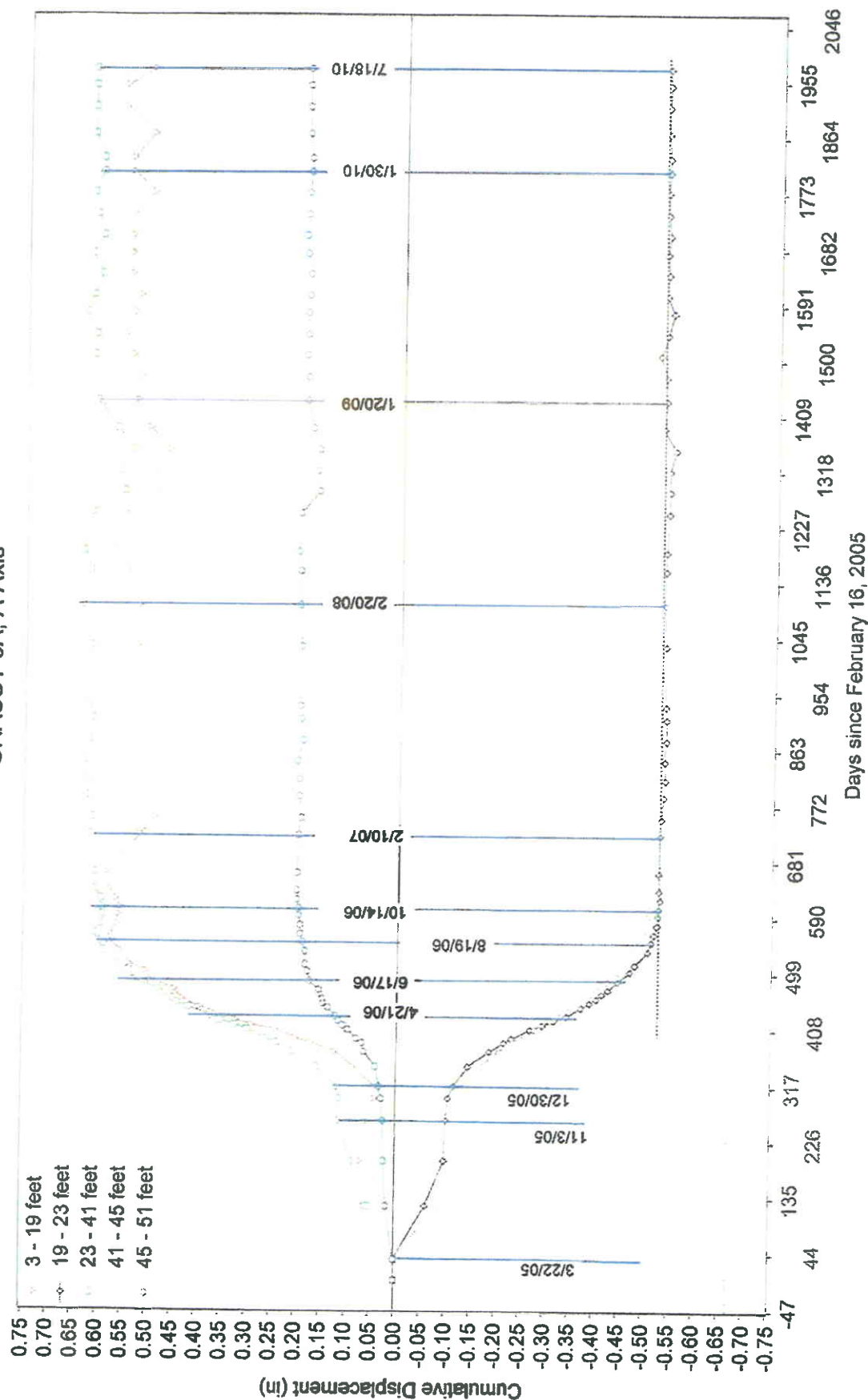
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FIGURE B-6

INCLINOMETER 3 - PLAN VIEW OF DEFLECTIONS
GRASSY TRAIL DAM AND RESERVOIR - CARBON COUNTY, UTAH

GRASSY 3A, A-Axis

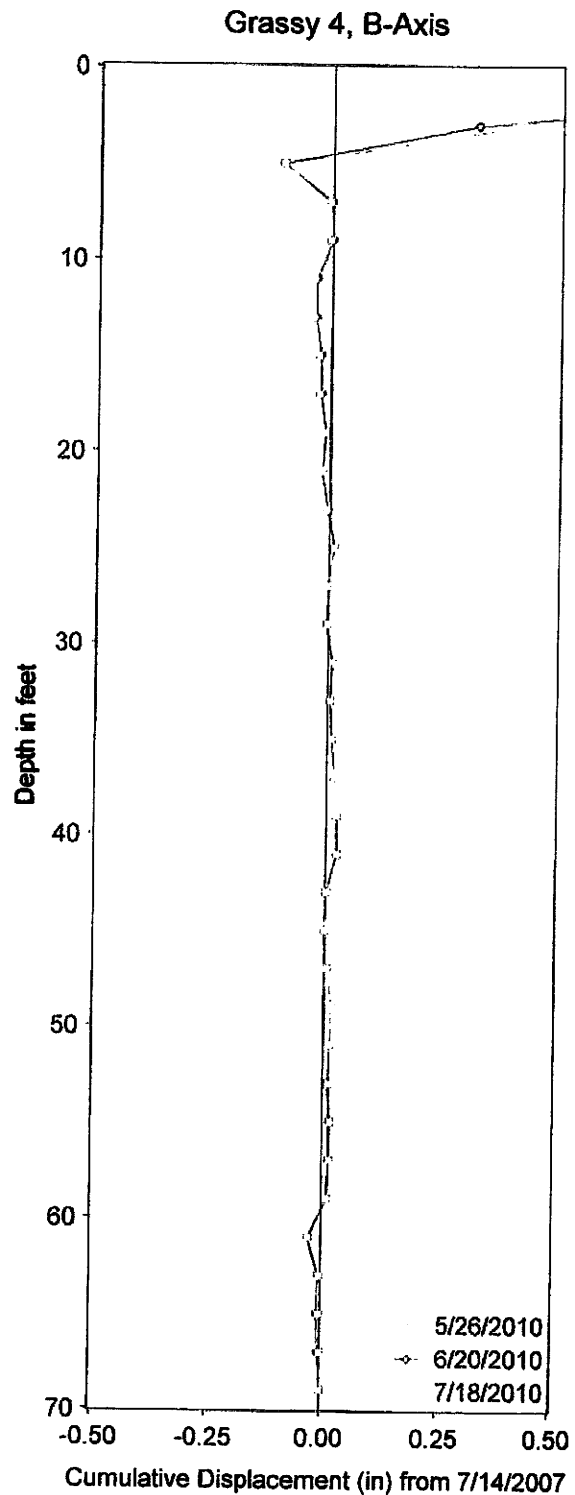
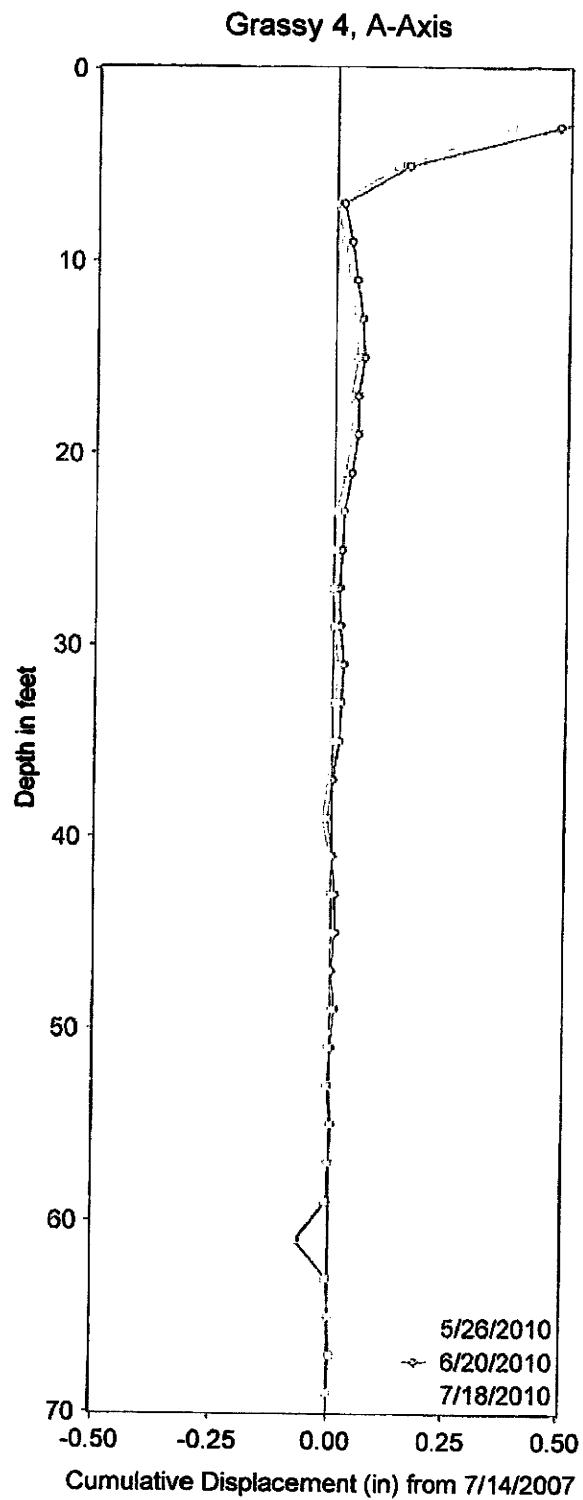


I-3 West/Right Abutment 7/18/10



Figure B-7

Inclinometer 3 - Deflections versus Time
Grassy Trail Dam, Carbon County, Utah



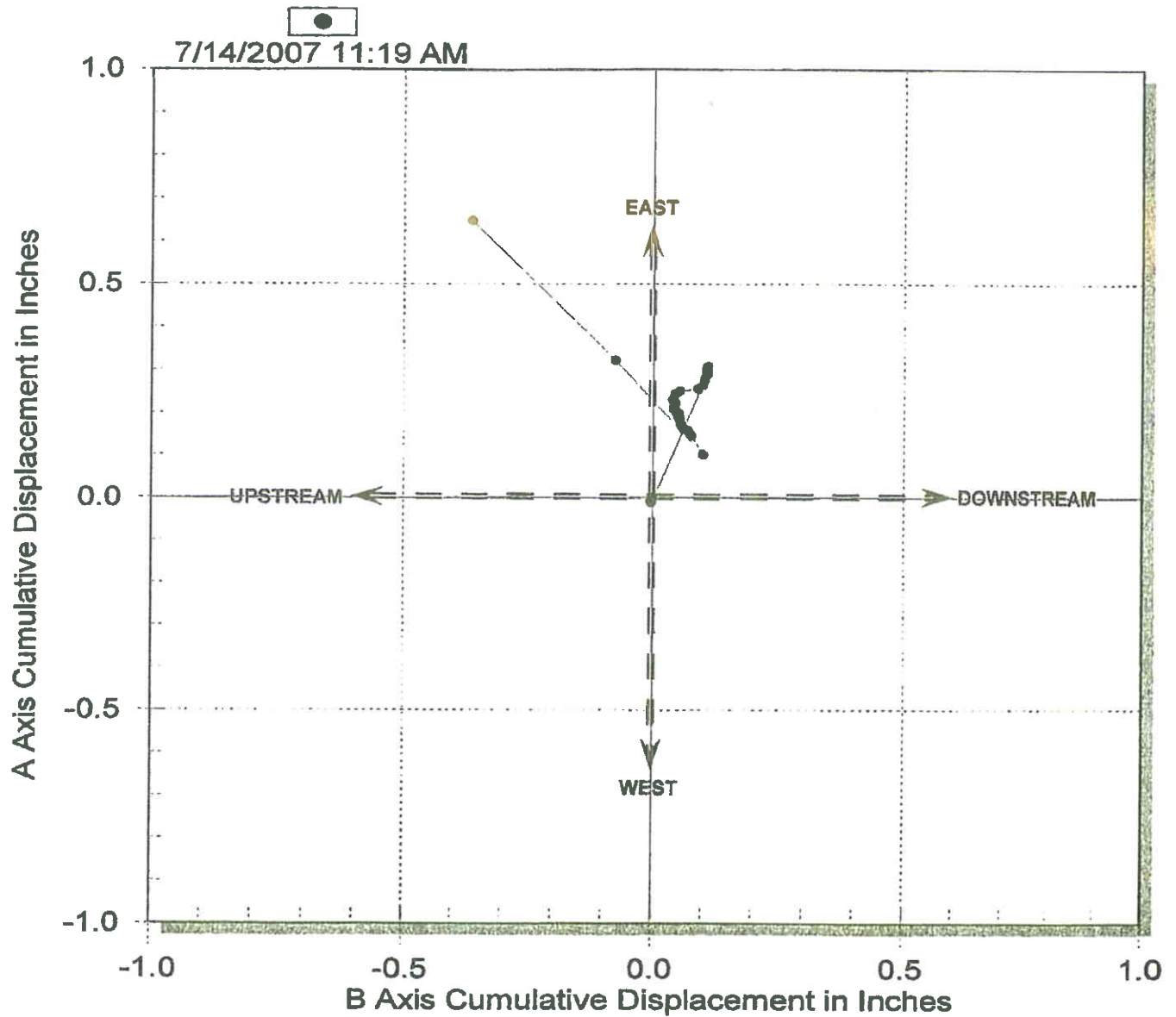
Repairs made 5/26/10 new survey
may not match true with old surveys

Top few feet are loose

Figure B-8
 Inclinator 4 - Deflection Profile
 Grassy Trail Dam, Carbon County, Utah

Grassy:4 - A Axis vs B Axis

Initial survey: 2/16/2005 05:37 PM



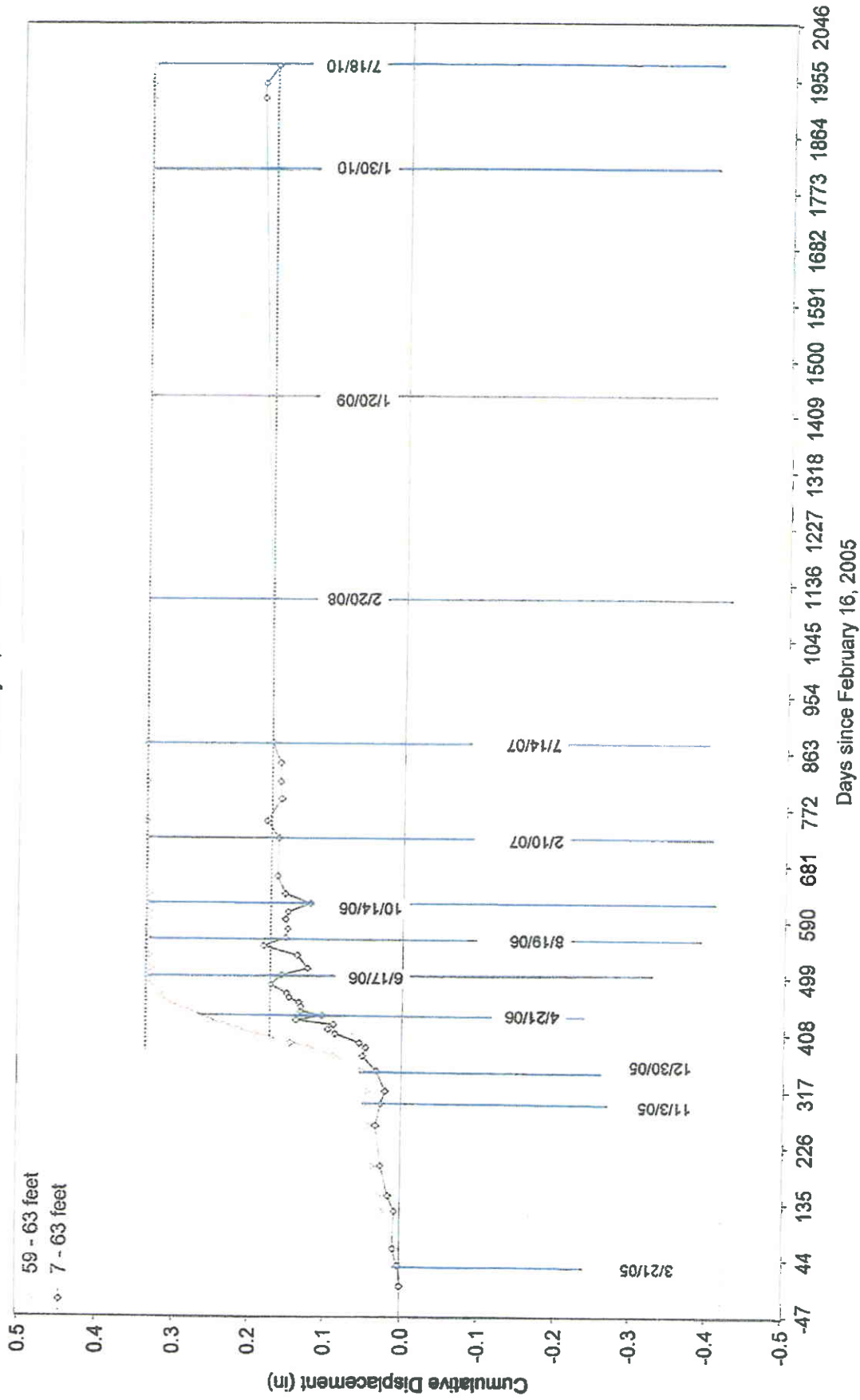
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FIGURE B-9

INCLINOMETER 4 - PLAN VIEW OF DEFLECTIONS
GRASSY TRAIL DAM AND RESERVOIR - CARBON COUNTY, UTAH

Grassy 4, A-Axis



Repaired 5/26/10

Reading after may be off from 2005 readings due to repair

7/18/10

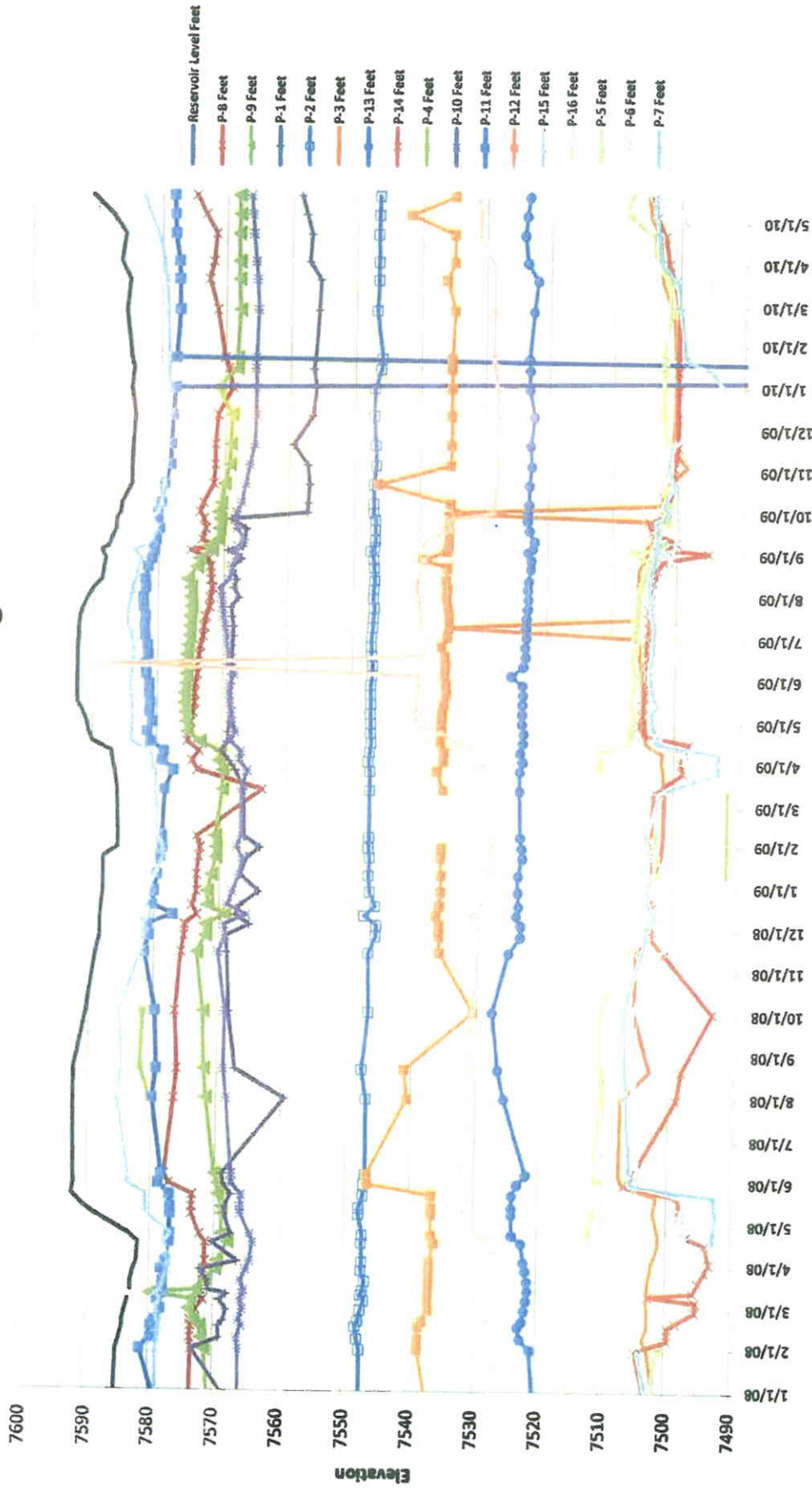


Figure B-10

Inclinometer 4 - Deflection verse Time
Grassy Trail Dam, Carbon, County, Utah

Appendix

Grassy Trail Dam Piezometer Readings



* NOTE - spikes are likely errors in data

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Figure C-1 Reservoir Elevation and Piezometer Readings

From 1/1/08 to 5/19/10 (data taken from Division of Natural Resources, Water Rights, Dam Safety web site)

GRASSY TRAIL DAM - CARBON COUNTY, UTAH

Grassy Trail Dam Seepage Monitoring

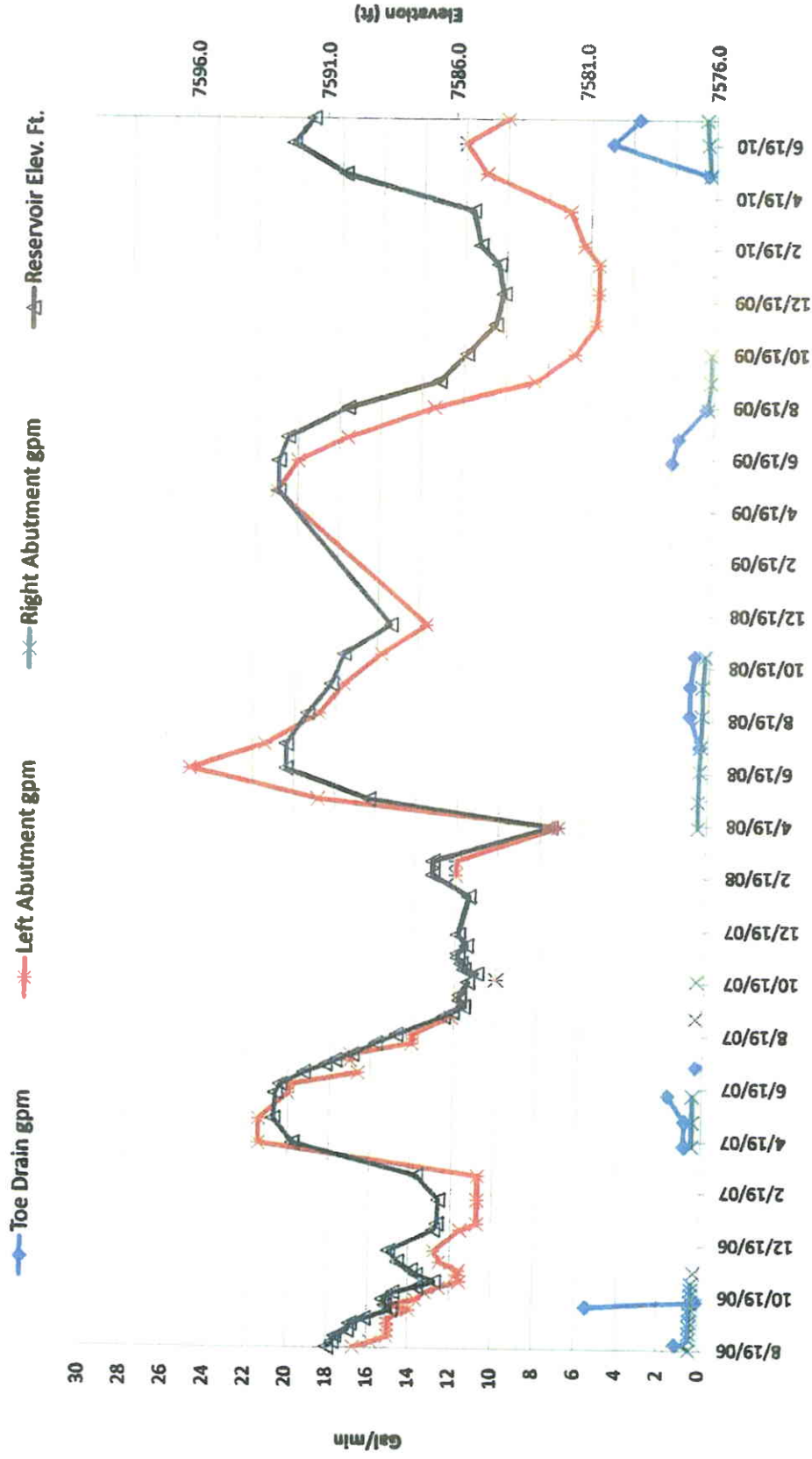


FIGURE C-2 Seepage Monitoring Readings
Seepage Reading and Reservoir Water Levels Versus Time 8/19/06 to 7/18/10
GRASSY TRAIL DAM - CARBON COUNTY, UTAH

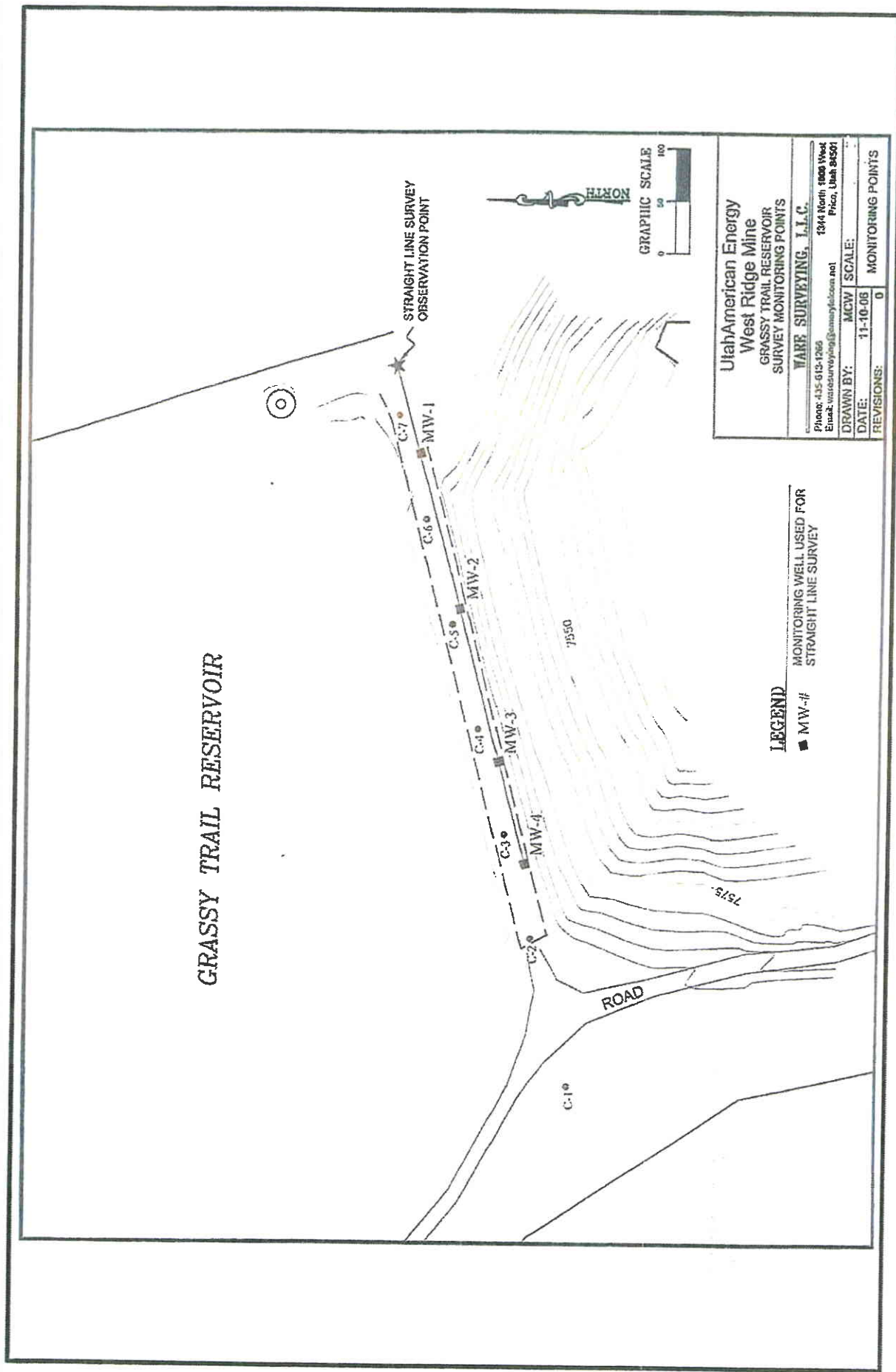


Figure C-3 Locations of Survey Points on Dam Crest
Project Grassy Trail Reservoir Mining Induced Seismicity
Location Carbon County, Utah

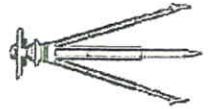
UtahAmerican Energy West Ridge Mine

Grassy Trail Reservoir
GPS Survey Data

Anticipated vertical accuracy ~ 0.08' +/-

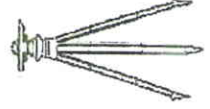
7/23/2010

STATION	12	13	14	MID	TOE
NORTHING	38,509.85	38,555.42	38,610.87	38,828.21	38,719.59
EASTING	37,047.46	37,064.56	37,099.85	37,580.00	37,664.94
GPS survey date.					
September 2004	7789.87	7771.43	7739.26		
November 2004	7789.84	7771.39	7739.21		
August 2005	7789.75	7771.30	7739.13		
April 2006	7789.46	7771.02	7738.83		
October 2006	7789.39	7770.95	7738.66		
May 2007	7789.45	7771.00	7738.77		
October 2007	7789.45	7771.01	7738.76		
May 2008	7789.57	7771.10	7738.78	7565.52	7515.69
7/13/2008	7789.54	7771.12	7738.82	7565.54	7515.68
8/29/2008	7789.51	7771.08	7738.75	7565.51	7515.63
9/27/2008	7789.49	7771.05	7738.79	7565.52	7515.66
11/24/2008	7789.52	7771.09	7738.76	7565.54	7515.67
3/31/2009	7789.52	7771.07	7738.74	7565.55	7515.65
4/27/2009	7789.50	7771.05	7738.71	7565.53	7515.64
5/29/2009	7789.39	7771.01	7738.72	7565.48	7515.62
6/28/2009	7789.44	7771.08	7738.71	7565.50	7515.63
8/6/2009	7789.49	7771.12	7738.68	7565.49	7515.64
9/9/2009	7789.50	7771.10	7738.67	7565.51	7515.66
10/25/2009	7789.48	7771.11	7738.70	7565.50	7515.67
11/20/2009	7789.49	7771.10	7738.69	7565.49	7515.65
4/15/2010	7789.35	7770.99	7738.80	7565.49	7515.68
5/26/2010	7789.32	7770.91	7738.84	7565.50	7515.66
6/24/2010	7789.36	7770.96	7738.74	7565.46	7515.64
7/22/2010	7789.33	7770.93	7738.75	7565.48	7515.64



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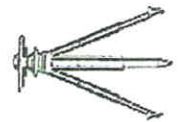
1344 North 1000 West - Price, UT 84501
Office: 435-613-1266
Email: waresurveying@emerytelcom.net



UtahAmerican Energy
West Ridge Mine
Grassy Trail Reservoir
Differential Level survey data

7/23/2010

STATION	C-1	C-2	C-3	C-4	C-5	C-6	C-7
NORTHING	38,830.55	38,865.88	38,892.13	38,917.88	38,943.74	38,969.37	38,996.01
EASTING	37,333.20	37,471.64	37,570.28	37,668.82	37,767.40	37,866.16	37,964.74
Differential level survey date.							
07/30/2002 Elevation	7593.49	7590.63	7590.29	7590.67	7590.44	7590.08	7590.08
08/29/2003 Elevation	7593.50	7590.65	7590.31	7590.69	7590.46	7590.08	7590.08
10/27/2004 Elevation	7593.50	7590.62	7590.30	7590.68	7590.45	7590.08	7590.08
08/12/2005 Elevation	7593.52	7590.66	7590.32	7590.69	7590.46	7590.09	7590.08
03/21/2006 Elevation	7593.50	7590.70	7590.30	7590.68	7590.45	7590.09	7590.08
04/14/2006 Elevation	7593.53	7590.73	7590.31	7590.67	7590.44	7590.08	7590.08
05/4/2006 Elevation	7593.54	7590.75	7590.31	7590.66	7590.43	7590.08	7590.08
05/30/2006 Elevation	7593.55	7590.78	7590.31	7590.65	7590.43	7590.07	7590.08
08/11/2006 Elevation	7593.49	7590.79	7590.31	7590.64	7590.43	7590.07	7590.08
09/18/2006 Elevation	7593.51	7590.82	7590.33	7590.66	7590.43	7590.08	7590.08
10/09/2007 Elevation	7593.54	7590.83	7590.33	7590.67	7590.44	7590.08	7590.08
04/28/2008 Elevation	7593.59	7590.84	7590.34	7590.69	7590.45	7590.09	7590.08
05/30/2008 Elevation	7593.56	7590.82	7590.32	7590.65	7590.44	7590.08	7590.08
07/13/2008 Elevation	7593.56	7590.84	7590.33	7590.66	7590.44	7590.09	7590.08
08/29/2008 Elevation	7593.57	7590.83	7590.33	7590.67	7590.45	7590.08	7590.08
09/27/2008 Elevation	7593.56	7590.84	7590.34	7590.68	7590.45	7590.08	7590.08
11/24/2008 Elevation	7593.55	7590.82	7590.32	7590.66	7590.44	7590.08	7590.08
02/23/2009 Elevation	7593.57	7590.83	7590.33	7590.67	7590.45	7590.08	7590.08
03/31/2009 Elevation	7593.57	7590.83	7590.32	7590.67	7590.44	7590.08	7590.08
04/27/2009 Elevation	7593.58	7590.83	7590.33	7590.68	7590.45	7590.08	7590.08
05/29/2009 Elevation	7593.59	7590.84	7590.33	7590.67	7590.44	7590.08	7590.08
06/28/2009 Elevation	7593.57	7590.83	7590.33	7590.67	7590.44	7590.08	7590.08
08/6/2009 Elevation	7593.57	7590.84	7590.33	7590.68	7590.45	7590.08	7590.08
09/9/2009 Elevation	7593.58	7590.84	7590.33	7590.68	7590.45	7590.08	7590.08
10/25/2009 Elevation	7593.56	7590.84	7590.33	7590.68	7590.44	7590.08	7590.08
11/20/2009 Elevation	7593.56	7590.83	7590.32	7590.67	7590.44	7590.08	7590.08
03/05/2010 Elevation	7593.58	7590.84	7590.33	7590.67	7590.45	7590.08	7590.08
04/16/2010 Elevation	7593.60	7590.84	7590.34	7590.68	7590.46	7590.08	7590.08
05/17/2010 Elevation	7593.59	7590.84	7590.33	7590.67	7590.45	7590.08	7590.08
06/24/2010 Elevation	7593.58	7590.84	7590.34	7590.68	7590.45	7590.08	7590.08
07/27/2010 Elevation	7593.56	7590.83	7590.32	7590.68	7590.45	7590.08	7590.08

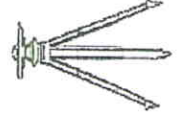


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1344 North 1000 West - Price, UT 84501

Office: 435-613-1266

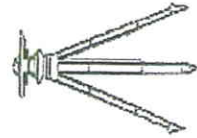
Email: waresurveying@emerytelcom.net



Utah American Energy
West Ridge Mine
 Grassy Trail Reservoir
 "Straight line" survey data

7/23/2010

Distance from control point to face of Monitoring Well (MW) in feet										
Date of survey	MW-1	MW-2	MW-3	MW-4	MW-5	MW-6	MW-7	West Mon.	Straight Line Movement	
12/14/2006	94.21	141.49	245.90	295.13	394.71	493.96	556.71	na	No	
1/31/2007	94.21	141.49	245.90	295.13	394.71	493.96	556.71	na	No	
3/1/2007	94.21	141.49	245.90	295.13	394.71	493.96	556.71	na	No	
3/29/2007	94.21	141.49	245.90	295.13	394.71	493.96	556.70	na	No	
5/30/2007	94.20	141.49	245.89	295.12	394.70	493.94	556.70	na	No	
6/5/2007	94.20	141.49	245.89	295.12	394.69	493.94	556.68	na	No	
7/2/2007	94.20	141.49	245.89	295.12	394.69	493.94	556.69	na	No	
10/9/2007	94.21	141.50	245.90	295.13	394.71	493.95	556.70	na	No	
11/10/2007	94.22	141.50	245.91	295.13	394.71	493.95	556.70	na	No	
12/27/2007	94.21	141.50	245.90	295.13	394.71	493.95	na	710.95	No	
4/28/2008	94.20	141.49	245.90	295.12	394.70	493.94	556.69	710.95	No	
5/30/2008	94.20	141.49	245.90	295.12	394.70	493.94	556.69	710.94	No	
7/13/2008	94.20	141.49	245.90	295.12	394.70	493.94	556.69	710.94	No	
8/29/2008	94.21	141.50	245.90	295.14	394.71	493.96	556.70	710.95	No	
9/27/2008	94.21	141.50	245.91	295.14	394.71	493.96	556.70	710.95	No	
11/24/2008	94.21	141.51	245.91	295.14	394.71	493.96	556.70	710.95	No	
1/26/2009	94.20	141.50	245.91	295.13	394.71	493.96	556.70	710.94	No	
2/23/2009	94.20	141.49	245.90	295.13	394.70	493.96	556.69	710.94	No	
3/31/2009	94.20	141.50	245.90	295.13	394.71	493.96	556.70	710.95	No	
4/27/2009	94.21	141.50	245.90	295.13	394.71	493.95	556.70	710.95	No	
5/29/2009	94.20	141.49	245.90	295.12	394.70	493.95	556.69	710.95	No	
6/28/2009	94.21	141.51	245.91	295.13	394.71	493.96	556.70	710.95	No	
8/6/2009	94.21	141.51	245.91	295.14	394.71	493.96	556.70	710.96	No	
9/9/2009	94.22	141.51	245.91	295.14	394.71	493.96	556.70	710.96	No	
10/25/2009	94.21	141.51	245.91	295.14	394.71	493.96	556.70	710.96	No	
11/20/2009	94.21	141.50	245.90	295.13	394.70	493.95	556.69	710.95	No	
3/5/2010	94.21	141.50	245.90	295.13	394.70	493.95	556.69	710.95	No	
4/15/2010	94.21	141.50	245.90	295.13	394.70	493.94	556.69	710.94	No	
5/17/2010	94.21	141.50	245.90	295.13	394.70	493.95	556.69	710.95	No	
6/24/2010	94.21	141.50	245.90	295.13	394.70	493.95	556.69	710.95	No	
7/22/2010	94.21	141.50	245.90	295.13	394.70	493.95	556.70	710.95	No	
Notes										



WARE SURVEYING, L.L.C.

1344 North 1000 West -
 Price, UT 84501
 Office: 435-613-1266

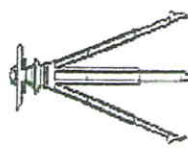


Exhibit E-2

Memo

RB&G
ENGINEERING, INC.

1435 W 820 N
Provo, UT, 84601
Phone: 801-374-5771
Fax: 801-374-5773

To: Bret Dixon, Utah Dam Safety
Dave Shaver, West Ridge Resources
From: Brad Price, Rob Johnson
Date: November 14, 2007
Re: Updated Monitoring Schedule, Grassy Trail Dam & Reservoir

An overview of data obtained in the past year from instrumentation at Grassy Trail Reservoir was presented at a meeting held October 25, 2007. It was noted that very few mining-induced seismic events had been detected near the dam since mining of Panel 7 was completed. Ground movements detected at settlement points and inclinometers in the past year have lessened dramatically; however, it appears that very slight movements may be ongoing. It was determined at the October 25 meeting that the monitoring program should generally continue as it has over the past year; with some slight modifications. The revised monitoring program, to be adopted until further notice, is as follows.

Accelerometers

Under the present conditions, the accelerometers should be monitored on a monthly basis to ensure that they are working properly and to upload the records of any new events that occur. The hillside instrument requires recalibration at this time. As agreed at the meeting, we will send this instrument to the manufacturer for recalibration at the expense of the mine.

Inclinometers

Based on discussion at the meeting, and subsequent correspondence/discussion, we (RB&G Engineering) will visit the site to take inclinometer readings one each month until further notice. Inclinometer No. 4, located on the west rim of the reservoir, was damaged by a contractor working for Questar Gas Company. We received a phone call from Tim Blackham of Questar the week of October 29, 2007, who expressed the willingness of Questar and their contractor to pay for and participate in any repairs needed. Repair of this device is currently in progress.

Piezometers and Drains

The dam's owners (East Carbon City and Sunnyside City) will continue to take responsibility for these items. It was agreed at the meeting that water levels in the piezometers may now be measured every two weeks. Site visits to visually inspect the dam and record drain flows should continue on a weekly basis. Care should be taken to note any new cracking, slumping, seepage, discolored flow from drains, or other irregularities on the dam and surrounding slopes – particularly in the vicinity of the right (west) abutment.

Survey Points

The survey of points on the dam will continue to be the responsibility of the mine. Surveys will continue to be conducted at monthly intervals. The survey should provide horizontal and vertical coordinates for the monuments at the crest, mid-slope, and toe of the dam. The basis for the survey will be a point located on the left (east) abutment, which is assumed to be stationary based on monitoring performed to date. The survey accuracy should be ± 0.01 foot vertical and ± 0.02 foot horizontal.

EXHIBIT E-2 – PAGE 2 OF 2

Monitoring of Events Reported by University of Utah Seismic Station (UUSS)

RB&G Engineering will continue to perform daily reviews of the UUSS web site. The threshold criteria used to trigger an immediate site visit will remain in effect. If an event of magnitude greater than 3.0 is reported within 5 miles of the dam, thorough site reconnaissance and reading of accelerometer data will be performed within 24 hours. Reading of all other instrumentation will be performed if any recorded ground acceleration exceeds 0.2g.

Under the anticipated conditions, the proposed schedule of monitoring frequencies and responsibilities is summarized on the table below. The recommended frequency may be changed at any time if instrumentation readings, visual observations, or any other factor indicates that this program is insufficient.

ITEM(S) TO BE MONITORED	MONITORING FREQUENCY	MONITORING RESPONSIBILITY	FREQUENCY OF DATA DISTRIBUTION*
Inclinometers, & Reconnaissance by Geologist/Engineer	Monthly	RB&G Engineering	Monthly
Accelerometers	Monthly	RB&G Engineering	Monthly
Drains & Visual Inspections	Weekly	East Carbon City (forward data to RB&G weekly)	Monthly
Piezometers	Bi-Weekly	East Carbon City	Monthly
Survey Points	Monthly	West Ridge Resources	Monthly
UUSS Website	Daily	RB&G Engineering	Monthly

*Data to be distributed to those listed below. Any unusual readings or observations to be reported to the group immediately.

DISTRIBUTION LIST – GRASSY TRAIL RESERVOIR MONITORING INFORMATION			
Name	Organization	Telephone	email
** Andrews, Bruce	Sunnyside City	435-888-4444	sunny1@emerytelcom.net
Blake, John	Trust Lands	801-538-5152	jblake@utah.gov
Brinton, Peter	BLM / USO	801-539-4162	Peter.Brinton@blm.gov
** Dean, Dana	DOGM	801-538-5259	danadean@utah.gov
Dixon, Bret	Utah Dam Safety	801-538-7373	bret@dixon@utah.gov
Faddies, Tom	SITLA	801-538-5150	tomfaddies@utah.gov
Falk, Stephen	BLM – Price	435-636-3605	Steve.Falk@blm.gov
Grubaugh-Littig, Pam	DOGM	801-538-5268	pamgrubaughlittig@utah.gov
Hansen, Michael	RB&G Engineering	801-374-5771	mhanzen@rbgengineering.com
Hedberg, Wayne	DOGM	801-538-5286	waynehedberg@utah.gov
Hess, Pete	DOGM – Price	435 613-1146 x203	petehess@utah.gov
Houskeeper, Karl	DOGM – Price	435-613-1146 x201	karlhouskeeper@utah.gov
Hudson, Gregg	BLM / USO	801-539-4040	Gregg.Hudson@blm.gov
Kohler, James	BLM / USO	801-539-4037	James.Kohler@blm.gov
** LaFontaine, Orlando	East Carbon City	435-888-6613	ecc@emerytelcom.net
Llewelyn, Jason	Carbon Co. Emerg. Services	435-636-3251	jllewelyn@co.carbon.ut.us
Marble, Dave	Utah Dam Safety	801-538-7376	davemarble@utah.gov
McKenzie, Jeff	BLM / USO	801-539-4038	Jeff.McKenzie@blm.gov
Perkes, Stan	BLM / USO	801-539-4036	Stan.Perkes@blm.gov
Price, Brad	RB&G Engineering	801-374-5771	bprice@rbgengineering.com
Rigby, Steve	BLM / FS – Price	435-636-3604	steve.rigby@blm.gov
Shaver, Dave	West Ridge Resources	435-888-4017	dshaver@coalsource.com
Stilson, Marc	Water Rights – Price	435-637-1303	marcstilson@utah.gov
Western, Wayne	DOGM	801-538-5263	waynewestern@utah.gov

** Names changed or added since the previous list dated December 4, 2006.

APPENDIX 7-5
WATER RIGHTS SUMMARY

APPENDIX 7-5

WATER RIGHTS SUMMARY

utah
80V Online Services Agency List Business
Utah Division of Water Rights

Search

Select Related Information

(WARNING: Water Rights makes NO claims as to the accuracy of this data.) RUN DATE: 01/26/2011

WATER RIGHT: 91-28 APPLICATION/CLAIM NO.: A5260 CERT. NO.: 808
CHANGES: a2840 Certificate a519 (Issued:)
a393 Certificate 808 (Issued:)
a4233 Certificate a519 (Issued:)

OWNERSHIP*****

NAME: East Carbon City (Public Water Supplier)
ADDR: 200 East Park Place
East Carbon UT 84520
INTEREST: 50% REMARKS:

NAME: Sunnyside City (Public Water Supplier)
ADDR: P.O. Box 69
Sunnyside UT 84539
INTEREST: 50% REMARKS:

DATES, ETC.*****

LAND OWNED BY APPLICANT? COUNTY TAX ID#:
FILED: 06/10/1913|PRIORITY: 06/10/1913|PUB BEGAN: |PUB ENDED: |NEWSPAPER:
ProtestEnd: |PROTESTED: [No] |HEARING HLD: |SE ACTION: [Approved]|ActionDate:02/10/1914|PROOF DUE:
EXTENSION: |ELEC/PROOF:[] |ELEC/PROOF: |CERT/WUC: 10/28/1970|LAP, ETC: |LAPS LETTER:
RUSH LETTR: |RENOVATE: |RECON REQ: |TYPE: []
PD BOOK: [91-5] |MAP: [58c] |PUB DATE:
*TYPE -- DOCUMENT -- STATUS--

Type of Right: Application to Appropriate Source of Info: Proposed Determination Status: Certificate

LOCATION OF WATER RIGHT***(Points of Diversion: Click on Location to access PLAT Program.)*****MAP VIEWER*****

FLOW: 2.2 cfs SOURCE: Grassy Trail Creek
COUNTY: Carbon COMMON DESCRIPTION:

POINTS OF DIVERSION -- SURFACE:

(1) S 2823 ft W 1166 ft from N4 cor, Sec 07, T 14S, R 14E, SLBM
Diverting Works:
(2) S 1163 ft W 644 ft from NE cor, Sec 18, T 14S, R 14E, SLBM
Diverting Works:
(3) N 1521 ft W 1983 ft from SE cor, Sec 29, T 14S, R 14E, SLBM
Diverting Works:
(4) N 307 ft E 124 ft from SW cor, Sec 01, T 15S, R 13E, SLBM
Diverting Works:
(5) N 1604 ft E 1245 ft from W4 cor, Sec 02, T 15S, R 13E, SLBM
Diverting Works:
(6) N 750 ft W 1345 ft from SE cor, Sec 03, T 15S, R 13E, SLBM
Diverting Works:
(7) S 566 ft E 4323 ft from NW cor, Sec 09, T 15S, R 13E, SLBM
Diverting Works:
(8) S 1149 ft E 1320 ft from NW cor, Sec 09, T 15S, R 13E, SLBM
Diverting Works:
(9) N 91 ft E 2390 ft from W4 cor, Sec 06, T 15S, R 14E, SLBM
Diverting Works:

Source:

Source:

Source:

Source:

Source:

Source:

Source:

Source:

Source:

Stream Alt Required?: No

USES OF WATER RIGHT***** ELU -- Equivalent Livestock Unit (cow, horse, etc.) ***** EDU -- Equivalent Domestic Unit or 1 Family

SUPPLEMENTAL GROUP NO.: 613926. Water Rights Appurtenant to the following use(s):
91-28(CERT), 84(CERT), 100(WUC), 114(WUC), 118(CERT)
125(WUC), 141(CERT), 158(CERT), 360(DEC), 361(DEC)
362(WUC), 363(DEC), 367(WUC), 368(WUC), 369(WUC)
372(DEC)

IRRIGATION: Sole Supply: UNEVALUATED acres Group Total: 66.5 Div Limit: 266.0 acft. PERIOD OF USE: 06/15 TO 09/15
Water User's Claim No. 100 is limited to the irrigation requirements of 6.54 acres.

###PLACE OF USE:	NORTH WEST QUARTER				NORTH EAST QUARTER				SOUTH WEST QUARTER				SOUTH EAST			
	NW	NE	SW	SE	NW	NE	SW	SE	NW	NE	SW	SE	NW	NE		
Sec 03 T 15S R 13E SLBM	*				*				*				*			
Sec 10 T 15S R 13E SLBM	*		30.0000		*		36.5000		*				*			

GROUP

SUPPLEMENTAL GROUP NO.: 613974. Water Rights Appurtenant to the following use(s):
91-28(CERT), 84(CERT), 114(WUC), 118(CERT), 125(WUC)
141(CERT), 158(CERT), 360(DEC), 361(DEC), 362(WUC)
363(DEC), 367(WUC), 368(WUC), 369(WUC), 372(DEC)

IRRIGATION: Sole Supply: UNEVALUATED acres Group Total: 932.4 Div Limit: 3729.6 acft. PERIOD OF USE: 04/01 TO 10/31

###PLACE OF USE:	NORTH WEST QUARTER				NORTH EAST QUARTER				SOUTH WEST QUARTER				SOUTH EAST			
	NW	NE	SW	SE	NW	NE	SW	SE	NW	NE	SW	SE	NW	NE		
Sec 24 T 15S R 12E SLBM	*				*		10.1000		*				*			
Sec 02 T 15S R 13E SLBM	*				*				*	12.3000	14.0800	23.8300	34.2900	21.9500		

[illegible]

SUPPLEMENTAL GROUP NO.: 613975. Water Rights Appurtenant to the following use(s):
91-28(CERT) 23(CERT) 01(CERT)

91-28 (CERT), 37 (CERT), 84 (CERT), 114 (WUC), 118 (CERT)
125 (WUC), 141 (CERT), 158 (CERT), 360 (DEC), 361 (DEC)
362 (WUC), 363 (DEC), 367 (WUC), 368 (WUC), 369 (WUC)
372 (DEC)

IRRIGATION: Sole Supply: UNEVALUATED acres Group Total: 102.85 Div Limit: 411.4 acft. PERIOD OF USE: 04/01 TO 10/31

###PLACE OF USE:

###PLACE OF USE:													
-----NORTH WEST QUARTER-----				*-----NORTH EAST QUARTER-----*				*-----SOUTH WEST QUARTER-----*				*-----SOUTH EAST QUARTER-----*	
* NW	NE	SW	SE	* NW	NE	SW	SE	* NW	NE	SW	SE	* NW	NE
Sec 19 T 15S R 12E SLBM	*			*				*				*	
Sec 24 T 15S R 12E SLBM	*			*				*		12.1000		*	
Sec 25 T 15S R 12E SLBM	*			*				*				*	
Sec 19 T 15S R 13E SLBM	*			*	2.6500			*				*	3.7000
Sec 30 T 15S R 13E SLBM	* 31.0000		22.2000	4.3000*				*		12.1000		*	
								*	4.7000			*	6.2000*

SUPPLEMENTAL GROUP NO.: 613976. Water Rights Appurtenant to the following use(s):

91-28 (CERT), 84 (CERT), 114 (WUC), 118 (CERT), 125 (WUC)
138 (WUC), 141 (CERT), 158 (CERT), 360 (DEC), 361 (DEC)
362 (WUC), 363 (DEC), 367 (WUC), 368 (WUC), 369 (WUC)
372 (DEC)

IRRIGATION: Sole Supply: UNEVALUATED acres Group Total: 72.2 Div Limit: 288.8 acft. PERIOD OF USE: 04/01 TO 10/31

###PLACE OF USE:

###PLACE OF USE:															
* NORTH WEST QUARTER *				* NORTH EAST QUARTER *				* SOUTH WEST QUARTER *				* SOUTH EAST QUARTER *			
NW	NE	SW	SE	NW	NE	SW	SE	NW	NE	SW	SE	NW	NE	SW	SE
Sec 10 T 15S R 13E SLBM			19.0000 *			30.2000	123.0000 *								

SUPPLEMENTAL GROUP NO.: 613977. Water Rights Appurtenant to the following use(s):

91-28 (CERT), 84 (CERT), 114 (WUC), 118 (CERT), 125 (WUC)
141 (CERT), 143 (CERT), 145 (CERT), 146 (WUC), 158 (CERT)
159 (CERT), 178 (CERT), 360 (DEC), 361 (DEC), 362 (WUC)
363 (DEC), 367 (WUC), 368 (WUC), 369 (WUC), 372 (DEC)

IRRIGATION: Sole Supply: UNEVALUATED acres Group Total: 15.63 Div Limit: 62.52 acft. PERIOD OF USE: 04/01 TO 10/31

###PLACE OF USE:

###PLACE OF USE:															
NORTH WEST QUARTER				NORTH EAST QUARTER				SOUTH WEST QUARTER				SOUTH EAST QUARTER			
NW	NE	SW	SE	NW	NE	SW	SE	NW	NE	SW	SE	NW	NE	SW	SE
Sec 17 T 15S R 14E SLBM															
Sec 18 T 15S R 14E SLBM								3.8000		5.8200					
									5.2100		0.8000				

SUPPLEMENTAL GROUP NO.: 613978. Water Rights Appurtenant to the following use(s):

91-28 (CERT), 84 (CERT), 114 (WUC), 118 (CERT), 125 (WUC)
137 (CERT), 141 (CERT), 158 (CERT), 360 (DEC), 361 (DEC)
362 (WUC), 363 (DEC), 367 (WUC), 368 (WUC), 369 (WUC)
372 (DEC)

IRRIGATION: Sole Supply: UNEVALUATED acres Group Total: 11.45 Div Limit: 45.8 acft. PERIOD OF USE: 04/01 TO 10/31

###PLACE OF USE:

```
#####PLACE OF USE:*****--NORTH WEST QUARTER-----NORTH EAST QUARTER-----SOUTH WEST QUARTER-----SOUTH EAST
Sec 02 T 15S R 13E SLBM*_____|_____|_____|_____* ____|_____|_____|_____* ____|_____|_____|_____* ____|_____|_____|_____|11.4500
=====GROUP
```

SUPPLEMENTAL GROUP NO.: 613979. Water Rights Appurtenant to the following use(s):

91-28 (CERT), 84 (CERT), 114 (WUC), 118 (CERT), 125 (WUC),
140 (CERT), 141 (CERT), 142 (CERT), 143 (CERT), 145 (CERT)
146 (WUC), 158 (CERT), 159 (CERT), 178 (CERT), 360 (DEC)
361 (DEC), 362 (WUC), 363 (DEC), 367 (WUC), 368 (WUC)
369 (WUC), 372 (DEC)

IRRIGATION: Sole Supply: UNEVALUATED acres Group Total: 149.02 Div Limit: 582.56 acft. PERIOD OF USE: 04/01 TO 10/31

###PLACE OF USE:

###PLACE OF USE:

	NORTH WEST QUARTER				NORTH EAST QUARTER				SOUTH WEST QUARTER				SOUTH EAST			
	NW	NE	SW	SE	NW	NE	SW	SE	NW	NE	SW	SE	NW	NE	SW	SE
<u>Sec 01 T 15S R 13E SLBM</u>	*				*				*				* NW	NE	SW	SE
<u>Sec 02 T 15S R 13E SLBM</u>	*				*				*	19.4100	26.3100	6.5600	15.9300	20.8800	8.6200	8

SUPPLEMENTAL GROUP NO.: 613980. Water Rights Appurtenant to the following use(s):
81-18 (CEPT) 28 (CEPT) 34 (CEPT)

91-19 (CERT), 28 (CERT), 84 (CERT), 114 (WUC), 118 (CERT)
120 (CERT), 124 (CERT), 125 (WUC), 141 (CERT), 143 (CERT)
145 (CERT), 146 (WUC), 158 (CERT), 159 (CERT), 178 (CERT)
360 (DEC), 361 (DEC), 362 (WUC), 363 (DEC), 367 (WUC)
368 (WUC), 369 (WUC), 372 (DEC)

DOMESTIC: Sole Supply: UNEVALUATED EDUS Group Total: 105.0000 Div Limit: 76.44 acft. PERIOD OF USE: 01/01 TO 12/31
Domestic uses in Columbia, Utah.

Domestic uses in Columbia, Utah.

*=====

SUPPLEMENTAL GROUP NO.: **613981**. Water Rights Appurtenant to the following use(s):
91-28(CERT), 84(CERT), 114(WUC), 118(CERT), 125(WUC)
139(CERT), 140(CERT), 141(CERT), 142(CERT), 143(CERT)
145(CERT), 146(WUC), 158(CERT), 159(CERT), 178(CERT)
360(DEC), 361(DEC), 362(WUC), 363(DEC), 367(WUC)
368(WUC), 369(WUC), 372(DEC)

DOMESTIC: Sole Supply: UNEVALUATED EDUs Group Total: 770.0000 Div Limit: 560.56 acft. PERIOD OF USE: 01/01 TO 12/31
 Flow for domestic is part of flow for irrigation. Domestic use at unincorporated areas at
 Sunnyside and East Carbon.

*=====

SUPPLEMENTAL GROUP NO.: **613983**. Water Rights Appurtenant to the following use(s):
91-19(CERT), 28(CERT), 84(CERT), 99(CERT), 114(WUC)
118(CERT), 125(WUC), 141(CERT), 143(CERT), 145(CERT)
146(WUC), 158(CERT), 159(CERT), 178(CERT), 332(UGWC)
360(DEC), 361(DEC), 362(WUC), 363(DEC), 367(WUC)
368(WUC), 369(WUC), 372(DEC)

MINING: DISTRICT: Columbia NAME: Columbia PERIOD OF USE: 01/01 TO 12/31
 ORES: coal
 Acre Feet Contributed by this Right for this Use: Unevaluated

*=====

SUPPLEMENTAL GROUP NO.: **613984**. Water Rights Appurtenant to the following use(s):
91-28(CERT), 84(CERT), 114(WUC), 118(CERT), 125(WUC)
141(CERT), 143(CERT), 145(CERT), 158(CERT), 159(CERT)
360(DEC), 361(DEC), 362(WUC), 363(DEC), 367(WUC)
368(WUC), 369(WUC), 372(DEC)

MINING: DISTRICT: Sunnyside NAME: Sunnyside PERIOD OF USE: 01/01 TO 12/31
 ORES: coal
 Acre Feet Contributed by this Right for this Use: Unevaluated

*=====

SUPPLEMENTAL GROUP NO.: **613985**. Water Rights Appurtenant to the following use(s):
91-28(CERT), 84(CERT), 114(WUC), 118(CERT), 125(WUC)
141(CERT), 143(CERT), 145(CERT), 146(WUC), 148(CERT)
149(CERT), 150(CERT), 158(CERT), 159(CERT), 178(CERT)
183(CERT), 360(DEC), 361(DEC), 362(WUC), 363(DEC)
367(WUC), 368(WUC), 369(WUC), 372(DEC)

MINING: DISTRICT: Columbia NAME: Horse Canyon PERIOD OF USE: 01/01 TO 12/31
 ORES: Coal
 Acre Feet Contributed by this Right for this Use: Unevaluated
 Administratively changed on Feb 14, 2007, by deleting the Domestic entry for 800 persons, and
 adding it to this Mining entry. The Mining was to employ and/or service the 800 persons.

INDUSTRIAL: In conjunction with the coal mining occurring at Horse Canyon. PERIOD OF USE: 01/01 TO 12/31
 Acre Feet Contributed by this Right for this Use: Unevaluated

*=====

SUPPLEMENTAL GROUP NO.: **614007**. Water Rights Appurtenant to the following use(s):
91-28(CERT), 84(CERT), 114(WUC), 118(CERT), 125(WUC)
141(CERT), 146(WUC), 158(CERT), 360(DEC), 361(DEC)
362(WUC), 363(DEC), 367(WUC), 368(WUC), 369(WUC)
372(DEC)

IRRIGATION: Sole Supply: UNEVALUATED acres Group Total: 11.28 Div Limit: 45.12 acft. PERIOD OF USE: 04/01 TO 10/15

###PLACE OF USE: *-----NORTH WEST QUARTER-----*-----NORTH EAST QUARTER-----*-----SOUTH WEST QUARTER-----*-----SOUTH EAST
 * NW NE SW SE * NW NE SW SE * NW NE SW SE * NW NE
 Sec 06 T 15S R 14E SLBM * 11.28000 *
 *-----GROUP

*=====

SUPPLEMENTAL GROUP NO.: **614158**. Water Rights Appurtenant to the following use(s):
91-28(CERT), 84(CERT), 114(WUC), 118(CERT), 125(WUC)
141(CERT), 143(CERT), 144(CERT), 145(CERT), 146(WUC)
158(CERT), 178(CERT), 239(APP), 360(DEC), 361(DEC)
362(WUC), 363(DEC), 367(WUC), 368(WUC), 369(WUC)
372(DEC)

MUNICIPAL: Sunnyside PERIOD OF USE: 01/01 TO 12/31
 Acre Feet Contributed by this Right for this Use: Unevaluated

*=====

SUPPLEMENTAL GROUP NO.: **614354**. Water Rights Appurtenant to the following use(s):
91-28(CERT), 84(CERT), 114(WUC), 125(WUC), 231(CERT)
362(WUC), 367(WUC), 368(WUC), 369(WUC)

IRRIGATION: Sole Supply: UNEVALUATED acres Group Total: 222.1 Div Limit: 0.0 acft. PERIOD OF USE: 04/01 TO 10/15
 WUC 91-231 is limited to the irrigation requirements of 160.0 acres.

INDUSTRIAL: Water uses related to coal mining. PERIOD OF USE: 01/01 TO 12/31
 Acre Feet Contributed by this Right for this Use: Unevaluated

###PLACE OF USE: *-----NORTH WEST QUARTER-----*-----NORTH EAST QUARTER-----*-----SOUTH WEST QUARTER-----*-----SOUTH EAST

	* NW	NE	SW	SE	* NW	NE	SW	SE	* NW	NE	SW	SE	* NW	NE	SW	SE
Sec 13 T 14S R 14E SLBM	*X	IX	IX	IX	*X	IX	IX	IX	*X	IX	IX	IX	*X	IX	IX	IX
Sec 17 T 14S R 14E SLBM	*X	IX	IX	IX	*X	IX	IX	IX	*X	IX	IX	IX	*X	IX	IX	IX
Sec 18 T 14S R 14E SLBM	*X	IX	IX	IX	*X	IX	IX	IX	*X	IX	IX	IX	*X	IX	IX	IX
Sec 19 T 14S R 14E SLBM	*X	IX	IX	IX	*X	IX	IX	IX	*X	IX	IX	IX	*X	IX	IX	IX
Sec 20 T 14S R 14E SLBM	*X	IX	IX	IX	*X	IX	IX	IX	*X	IX	IX	IX	*X	IX	IX	IX
Sec 21 T 14S R 14E SLBM	*X	IX	IX	IX	*X	IX	IX	IX	*X	IX	IX	IX	*X	IX	IX	IX
Sec 24 T 14S R 14E SLBM	*X	IX	IX	IX	*X	IX	IX	IX	*X	IX	IX	IX	*X	IX	IX	IX

Sec 28 T 14S R 14E SLBM	*X	IX	IX	IX	*X	IX	IX	IX	*X	IX	IX	IX	*X	IX	IX
Sec 29 T 14S R 14E SLBM	*X	IX	IX	IX	*X	IX	IX	IX	*X	IX	IX	IX	*X	IX	IX
Sec 30 T 14S R 14E SLBM	*X	IX	IX	IX	*X	IX	IX	IX	*X	IX	IX	IX	*X	IX	IX
Sec 31 T 14S R 14E SLBM	*X	IX	IX	IX	*X	IX	IX	IX	*X	IX	IX	IX	*X	IX	IX
Sec 32 T 14S R 14E SLBM	*X	IX	IX	IX	*X	IX	IX	IX	*X	IX	IX	IX	*X	IX	IX
Sec 33 T 14S R 14E SLBM	*X	IX	IX	IX	*X	IX	IX	IX	*X	IX	IX	IX	*X	IX	IX
Sec 34 T 14S R 14E SLBM	*X	IX	IX	IX	*X	IX	IX	IX	*X	IX	IX	IX	*X	IX	IX
Sec 01 T 15S R 13E SLBM	*				*								*		
Sec 02 T 15S R 13E SLBM	* 3.5000	7.9000	20.5000	4.1000	*				2.3000	*			*		
Sec 03 T 15S R 13E SLBM	*				*					*			*		
Sec 10 T 15S R 13E SLBM	*	29.6000		3.6000	11.7000	31.8000	1.1000	*					3.5000	*	2
Sec 03 T 15S R 14E SLBM	*X	IX	IX	IX	*X	IX	IX	IX	*X	IX	IX	IX	*X	IX	IX
Sec 04 T 15S R 14E SLBM	*X	IX	IX	IX	*X	IX	IX	IX	*X	IX	IX	IX	*X	IX	IX
Sec 05 T 15S R 14E SLBM	* 4.4000				*					*			*		
Sec 06 T 15S R 14E SLBM	*		2.5000	14.3000	*	0.2000	3.4000	7.2000	12.2000	9.3000			3.7000	24.2000	0.3000
															16
															GROUP

=====

This Right (91-28) has an evaluated sole-supply total for irrigation of 0.0000 acres.

=====

This Right (91-28) is a member of 15 supplemental water right groups with irrigated acreage totaling 1583.4300 acres.

=====

Storage from 03/15 to 12/15, inclusive, in Grassy Trail Reservoir with a maximum capacity of 916.000 acre-feet, located in:

Height of Dam:	89	NORTH-WEST¼	NORTH-EAST¼	SOUTH-WEST¼	SOUTH-EAST¼
Area Inundated:		NW NE SW SE	NW NE SW SE	NW NE SW SE	NW NE SW SE
Sec 07 T 14S R 14E SLBM	* X: X: X: X*	* : : : *	* X: X: : *	* : : : *	

Small Dam Required?: No

=====

OTHER COMMENTS*****

=====

Also included in claim is Certificate Number a-519.

WUC 91-28 is limited to the irrigation requirements of 149.90 acres.

*****E N D O F D A T A*****

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Select Related Information

(WARNING: Water Rights makes NO claims as to the accuracy of this data.) RUN DATE: 01/26/2011

WATER RIGHT: **91-84** APPLICATION/CLAIM NO.: **A9462** CERT. NO.: 2047
 CHANGES: a2839 Certificate a525 (Issued:)
 a4239 Certificate a525 (Issued:)

OWNERSHIP*****

NAME: East Carbon City (Public Water Supplier)
 ADDR: 200 East Park Place
 East Carbon UT 84520
 INTEREST: 50% REMARKS:

NAME: Sunnyside City (Public Water Supplier)
 ADDR: P.O. Box 69
 Sunnyside UT 84539
 INTEREST: 50% REMARKS:

DATES, ETC.*****

LAND OWNED BY APPLICANT? COUNTY TAX ID#:
 FILED: 01/03/1924|PRIORITY: 01/31/1924|PUB BEGAN: |PUB ENDED: |NEWSPAPER:
 ProtestEnd: |PROTESTED: [No] |HEARNG HLD: |SE ACTION: [Approved]|ActionDate:09/14/1924|PROOF DUE:
 EXTENSION: |ELEC/PROOF:[] |ELEC/PROOF: |CERT/WUC: 10/28/1970|LAP, ETC: |LAPS LETTER:
 RUSH LETTR: |RENOVATE: |RECON REQ: |TYPE: { }
 PD BOOK: [91-5] |MAP: [58c] |PUB DATE:

*TYPE -- DOCUMENT -- STATUS--
 Type of Right: Application to Appropriate Source of Info: Proposed Determination Status: Certificate

LOCATION OF WATER RIGHT*** (Points of Diversion: Click on Location to access PLAT Program.)*******MAP VIEWER*******

FLOW: 2.0 cfs SOURCE: Grassy Trail Creek
 COUNTY: Carbon COMMON DESCRIPTION:

POINTS OF DIVERSION -- SURFACE:

- (1) S 2824 ft W 1166 ft from N4 cor, Sec 07, T 14S, R 14E, SLBM
 Diverting Works:
- (2) S 1163 ft W 644 ft from NE cor, Sec 18, T 14S, R 14E, SLBM
 Diverting Works:
- (3) N 1521 ft W 1983 ft from SE cor, Sec 29, T 14S, R 14E, SLBM
 Diverting Works:
- (4) S 1013 ft E 125 ft from W4 cor, Sec 01, T 15S, R 13E, SLBM
 Diverting Works:
- (5) N 1604 ft E 1245 ft from SW cor, Sec 02, T 15S, R 13E, SLBM
 Diverting Works:
- (6) N 750 ft W 1345 ft from SE cor, Sec 03, T 15S, R 13E, SLBM
 Diverting Works:
- (7) S 566 ft E 4323 ft from NW cor, Sec 09, T 15S, R 13E, SLBM
 Diverting Works:
- (8) S 1149 ft E 1320 ft from NW cor, Sec 09, T 15S, R 13E, SLBM
 Diverting Works:
- (9) N 91 ft E 2390 ft from W4 cor, Sec 06, T 15S, R 14E, SLBM
 Diverting Works:

Source:

Source:

Source:

Source:

Source:

Source:

Source:

Source:

Source:

Stream Alt Required?: No

USES OF WATER RIGHT***** ELU -- Equivalent Livestock Unit (cow, horse, etc.) ***** EDU -- Equivalent Domestic Unit or 1 Family

SUPPLEMENTAL GROUP NO.: **613926**. Water Rights Appurtenant to the following use(s):

91-28(CERT), 84(CERT), 100(WUC), 114(WUC), 118(CERT), 125(WUC)
 125(WUC), 141(CERT), 158(CERT), 360(DEC), 361(DEC)
 362(WUC), 363(DEC), 367(WUC), 368(WUC), 369(WUC)
 372(DEC)

IRRIGATION: Sole Supply: UNEVALUATED acres Group Total: 66.5 Div Limit: 266.0 acft. PERIOD OF USE: 06/15 TO 09/15
 Water User's Claim No. 100 is limited to the irrigation requirements of 6.54 acres.

###PLACE OF USE:	NORTH WEST QUARTER				NORTH EAST QUARTER				SOUTH WEST QUARTER				SOUTH EAST	
	NW	NE	SW	SE	NW	NE	SW	SE	NW	NE	SW	SE	NW	NE
Sec 03 T 15S R 13E SLBM	*				*				*				*	
Sec 10 T 15S R 13E SLBM	*		30.0000		*		36.5000		*				*	

SUPPLEMENTAL GROUP NO.: **613974**. Water Rights Appurtenant to the following use(s):

91-28(CERT), 84(CERT), 114(WUC), 118(CERT), 125(WUC)
 141(CERT), 158(CERT), 360(DEC), 361(DEC), 362(WUC)
 363(DEC), 367(WUC), 368(WUC), 369(WUC), 372(DEC)

IRRIGATION: Sole Supply: UNEVALUATED acres Group Total: 932.4 Div Limit: 3729.6 acft. PERIOD OF USE: 04/01 TO 10/31

###PLACE OF USE:	NORTH WEST QUARTER				NORTH EAST QUARTER				SOUTH WEST QUARTER				SOUTH EAST	
	NW	NE	SW	SE	NW	NE	SW	SE	NW	NE	SW	SE	NW	NE
Sec 24 T 15S R 12E SLBM	*				*				*				*	
Sec 02 T 15S R 13E SLBM	*				*		10.1000		*		6.6000		*	
Sec 03 T 15S R 13E SLBM	*				*				*		12.3000	14.0800	23.8300	34.2900+21.9500
													*	7.4000 | 2

[illegible]

GROUP

SUPPLEMENTAL GROUP NO.: 613975. Water Rights Appurtenant to the following use(s):
91-28(CERT) 37(CERT) 84(CERT) 114(MUC) 116(CERT)

91-28 (CERT), 37 (CERT), 84 (CERT), 114 (WUC), 118 (CERT)
125 (WUC), 141 (CERT), 158 (CERT), 360 (DEC), 361 (DEC)
362 (WUC), 363 (DEC), 367 (WUC), 368 (WUC), 369 (WUC)
372 (DEC)

IRRIGATION: Sole Supply: UNEVALUATED acres Group Total: 102.85 Div Limit: 411.4 acft. PERIOD OF USE: 04/01 TO 10/31

###PLACE OF USE:

	* NW	NE	SW	SE	* NW	NE	SW	SE	* NW	NE	SW	SE	* NW	NE	SW	SE
Sec 19 T 15S R 12E SLBM	*				*				*				*			
Sec 24 T 15S R 12E SLBM	*				*				*				*		12.1000	
Sec 25 T 15S R 12E SLBM	*				*				*				*			
Sec 19 T 15S R 13E SLBM	*				*		2.6500		*				*			3.7000
Sec 30 T 15S R 13E SLBM	*31.0000		22.2000	4.3000*											12.1000	
										4.7000					6.2000*	

GROUP

SUPPLEMENTAL GROUP NO.: 613976. Water Rights Appurtenant to the following use(s):
91-28(CERT), 84(CERT), 114(WUC), 118(CERT), 125(WUC)

91-28 (CERT), 84 (CERT), 114 (WUC), 118 (CERT), 125 (WUC),
138 (WUC), 141 (CERT), 158 (CERT), 360 (DEC), 361 (DEC)
362 (WUC), 363 (DEC), 367 (WUC), 368 (WUC), 369 (WUC)
372 (DEC)

IRRIGATION: Sole Supply; UNEVALUATED acres Group Total: 72.2 Div Limit: 288.8 acft. PERIOD OF USE: 04/01 TO 10/31

##PLACE OF USE:

	NORTH WEST QUARTER				NORTH EAST QUARTER				SOUTH WEST QUARTER				SOUTH EAST	
	NW	NE	SW	SE	NW	NE	SW	SE	NW	NE	SW	SE	NW	NE
Sec 10 T 15S R 13E SLBM				19.0000*			130.2000	23.0000*						

GROUP

SUPPLEMENTAL GROUP NO.: 613977. Water Rights Appurtenant to the following use(s):
91-28(CERT), 84(CERT), 114(BUC), 119(CERT), 125(CERT)

91-28 (CERT), 84 (CERT), 114 (WUC), 118 (CERT), 125 (WUC)
141 (CERT), 143 (CERT), 145 (CERT), 146 (WUC), 158 (CERT)
159 (CERT), 178 (CERT), 360 (DEC), 361 (DEC), 362 (WUC)
363 (DEC), 367 (WUC), 368 (WUC), 369 (WUC), 372 (DEC)

IRRIGATION: Sole Supply: UNEVALUATED acres Group Total: 15.63 Div Limit: 62.52 acft. PERIOD OF USE: 04/01 TO 10/31

###PLACE OF USE:

	NORTH WEST QUARTER				NORTH EAST QUARTER				SOUTH WEST QUARTER				SOUTH EAST	
	NW	NE	SW	SE	NW	NE	SW	SE	NW	NE	SW	SE	NW	NE
Sec 17 T 15S R 14E SLBM	*				*				*				*	
Sec 18 T 15S R 14E SLBM	*				*				3.8000		5.8200		*	
										5.2100		0.8000*		

GROUP

SUPPLEMENTAL GROUP NO.: 613978. Water Rights Appurtenant to the following use(s):
91-28 (CEPT) 84 (CEPT) 114 (EUC) 118 (CEPT) 125 (CEPT)

91-28 (CERT), 84 (CERT), 114 (WUC), 118 (CERT), 125 (WUC)
137 (CERT), 141 (CERT), 158 (CERT), 360 (DEC), 361 (DEC)
362 (WUC), 363 (DEC), 367 (WUC), 368 (WUC), 369 (WUC)
372 (DEC)

IRRIGATION: Sole Supply: UNEVALUATED acres Group Total: 11.45 Div Limit: 45.8 acft. PERIOD OF USE: 04/01 TO 10/31

###PLACE OF USE:

	NORTH WEST QUARTER				NORTH EAST QUARTER				SOUTH WEST QUARTER				SOUTH EAST	
	NW	NE	SW	SE	NW	NE	SW	SE	NW	NE	SW	SE	NW	NE
Sec 02 T 15S R 13E SLBM	*				*				*				*	

GROUP

SUPPLEMENTAL GROUP NO.: 613979. Water Rights Appurtenant to the following use(s):
81-38 (CERR) 84 (CERR) 114 (CERR)

91-28(CERT), 84(CERT), 114(WUC), 118(WUC), 125(WUC),
146(CERT), 141(CERT), 142(CERT), 143(CERT), 145(CERT),
146(WUC), 158(CERT), 159(CERT), 178(CERT), 360(DEC),
361(DEC), 362(WUC), 363(DEC), 367(WUC), 368(WUC),
369(WUC), 372(DEC).

.....
 IRRIGATION: Sole Supply: UNEVALUATED acres Group Total: 149.02 Div Limit: 582.56 acft. PERIOD OF USE: 04/01 TO 10/31

###PLACE OF USE:

	NORTH WEST QUARTER				NORTH EAST QUARTER				SOUTH WEST QUARTER				SOUTH EAST	
	NW	NE	SW	SE	NW	NE	SW	SE	NW	NE	SW	SE	NW	NE
Sec 01 T 15S R 13E SLBM	*				*				*				*	
Sec 02 T 15S R 13E SLBM	*				*				19.4100	26.3100	6.5600	15.9300	20.8800	8.6200

DUP

SUPPLEMENTAL GROUP NO.: 613980. Water Rights Appurtenant to the following use(s):
91-19(CRPT) 28(CRPT) 84(CRPT) 114(CRPT)

91-19(CERT), 28(CERT), 84(CERT), 114(WUC), 118(CERT),
120(CERT), 124(CERT), 125(WUC), 141(CERT), 143(CERT),
145(CERT), 146(WUC), 158(CERT), 159(CERT), 178(CERT),
360(DEC), 361(DEC), 362(WUC), 363(DEC), 367(WUC),
368(WUC), 369(WUC), 372(DEC)

DOMESTIC: Sole Supply: UNEVALUATED EDUs Group Total: 105.0000 Div Limit: 76.44 acft. PERIOD OF USE: 01/01 TO 12/31
Domestic uses in Columbia, Utah.

Domestic uses in Columbia, Utah.

SUPPLEMENTAL GROUP NO.: **613981**. Water Rights Appurtenant to the following use(s):

91-28(CERT), 84(CERT), 114(WUC), 118(CERT), 125(WUC)
139(CERT), 140(CERT), 141(CERT), 142(CERT), 143(CERT)
145(CERT), 146(WUC), 158(CERT), 159(CERT), 178(CERT)
360(DEC), 361(DEC), 362(WUC), 363(DEC), 367(WUC)
368(WUC), 369(WUC), 372(DEC)

DOMESTIC: Sole Supply: UNEVALUATED EDUS Group Total: 770.0000 Div Limit: 560.56 acft. PERIOD OF USE: 01/01 TO 12/31
 Flow for domestic is part of flow for irrigation. Domestic use at unincorporated areas at
 Sunnyside and East Carbon.

SUPPLEMENTAL GROUP NO.: **613983**. Water Rights Appurtenant to the following use(s):

91-19(CERT), 28(CERT), 84(CERT), 99(CERT), 114(WUC)
118(CERT), 125(WUC), 141(CERT), 143(CERT), 145(CERT)
146(WUC), 158(CERT), 159(CERT), 178(CERT), 332(UGWC)
360(DEC), 361(DEC), 362(WUC), 363(DEC), 367(WUC)
368(WUC), 369(WUC), 372(DEC)

MINING: DISTRICT: Columbia NAME: Columbia PERIOD OF USE: 01/01 TO 12/31
 ORES: coal
 Acre Feet Contributed by this Right for this Use: Unevaluated

SUPPLEMENTAL GROUP NO.: **613984**. Water Rights Appurtenant to the following use(s):

91-28(CERT), 84(CERT), 114(WUC), 118(CERT), 125(WUC)
141(CERT), 143(CERT), 145(CERT), 158(CERT), 159(CERT)
360(DEC), 361(DEC), 362(WUC), 363(DEC), 367(WUC)
368(WUC), 369(WUC), 372(DEC)

MINING: DISTRICT: Sunnyside NAME: Sunnyside PERIOD OF USE: 01/01 TO 12/31
 ORES: coal
 Acre Feet Contributed by this Right for this Use: Unevaluated

SUPPLEMENTAL GROUP NO.: **613985**. Water Rights Appurtenant to the following use(s):

91-28(CERT), 84(CERT), 114(WUC), 118(CERT), 125(WUC)
141(CERT), 143(CERT), 145(CERT), 146(WUC), 148(CERT)
149(CERT), 150(CERT), 158(CERT), 159(CERT), 178(CERT)
183(CERT), 360(DEC), 361(DEC), 362(WUC), 363(DEC)
367(WUC), 368(WUC), 369(WUC), 372(DEC)

MINING: DISTRICT: Columbia NAME: Horse Canyon PERIOD OF USE: 01/01 TO 12/31
 ORES: Coal

Acre Feet Contributed by this Right for this Use: Unevaluated
 Administratively changed on Feb 14, 2007, by deleting the Domestic entry for 800 persons, and
 adding it to this Mining entry. The Mining was to employ and/or service the 800 persons.

INDUSTRIAL: In conjunction with the coal mining occurring at Horse Canyon. PERIOD OF USE: 01/01 TO 12/31
 Acre Feet Contributed by this Right for this Use: Unevaluated

SUPPLEMENTAL GROUP NO.: **614007**. Water Rights Appurtenant to the following use(s):

91-28(CERT), 84(CERT), 114(WUC), 118(CERT), 125(WUC)
141(CERT), 146(WUC), 158(CERT), 360(DEC), 361(DEC)
362(WUC), 363(DEC), 367(WUC), 368(WUC), 369(WUC)
372(DEC)

IRRIGATION: Sole Supply: UNEVALUATED acres Group Total: 11.28 Div Limit: 45.12 acft. PERIOD OF USE: 04/01 TO 10/15

###PLACE OF USE: *-----NORTH WEST QUARTER-----*-----NORTH EAST QUARTER-----*-----SOUTH WEST QUARTER-----*-----SOUTH EAST
 * NW NE SW SE * NW NE SW SE * NW NE SW SE * NW NE SW SE * NW NE SW SE
 Sec 06 T 15S R 14E SLBM * 11.28001

SUPPLEMENTAL GROUP NO.: **614158**. Water Rights Appurtenant to the following use(s):

91-28(CERT), 84(CERT), 114(WUC), 118(CERT), 125(WUC)
141(CERT), 143(CERT), 144(CERT), 145(CERT), 146(WUC)
158(CERT), 178(CERT), 239(APPL), 360(DEC), 361(DEC)
362(WUC), 363(DEC), 367(WUC), 368(WUC), 369(WUC)
372(DEC)

MUNICIPAL: Sunnyside PERIOD OF USE: 01/01 TO 12/31
 Acre Feet Contributed by this Right for this Use: Unevaluated

SUPPLEMENTAL GROUP NO.: **614354**. Water Rights Appurtenant to the following use(s):
91-28(CERT), 84(CERT), 114(WUC), 125(WUC), 231(CERT)
362(WUC), 367(WUC), 368(WUC), 369(WUC)

IRRIGATION: Sole Supply: UNEVALUATED acres Group Total: 222.1 Div Limit: 0.0 acft. PERIOD OF USE: 04/01 TO 10/15
 WUC 91-231 is limited to the irrigation requirements of 160.0 acres.

INDUSTRIAL: Water uses related to coal mining. PERIOD OF USE: 01/01 TO 12/31
 Acre Feet Contributed by this Right for this Use: Unevaluated

###PLACE OF USE: *-----NORTH WEST QUARTER-----*-----NORTH EAST QUARTER-----*-----SOUTH WEST QUARTER-----*-----SOUTH EAST
 * NW NE SW SE * NW NE SW SE * NW NE SW SE * NW NE SW SE * NW NE SW SE
 Sec 13 T 14S R 14E SLBM *X |X |X |X *X |X |X |X *X |X |X |X *X |X |X |X
 Sec 17 T 14S R 14E SLBM *X |X |X |X *X |X |X |X *X |X |X |X *X |X |X |X
 Sec 18 T 14S R 14E SLBM *X |X |X |X *X |X |X |X *X |X |X |X *X |X |X |X
 Sec 19 T 14S R 14E SLBM *X |X |X |X *X |X |X |X *X |X |X |X *X |X |X |X
 Sec 20 T 14S R 14E SLBM *X |X |X |X *X |X |X |X *X |X |X |X *X |X |X |X
 Sec 21 T 14S R 14E SLBM *X |X |X |X *X |X |X |X *X |X |X |X *X |X |X |X
 Sec 24 T 14S R 14E SLBM *X |X |X |X *X |X |X |X *X |X |X |X *X |X |X |X
 Sec 28 T 14S R 14E SLBM *X |X |X |X *X |X |X |X *X |X |X |X *X |X |X |X

Sec 29 T 14S R 14E SLBM	*X	IX	IX	IX	*X	IX	IX	IX	*X	IX	IX	IX	*X	IX	IX
Sec 30 T 14S R 14E SLBM	*X	IX	IX	IX	*X	IX	IX	IX	*X	IX	IX	IX	*X	IX	IX
Sec 31 T 14S R 14E SLBM	*X	IX	IX	IX	*X	IX	IX	IX	*X	IX	IX	IX	*X	IX	IX
Sec 32 T 14S R 14E SLBM	*X	IX	IX	IX	*X	IX	IX	IX	*X	IX	IX	IX	*X	IX	IX
Sec 33 T 14S R 14E SLBM	*X	IX	IX	IX	*X	IX	IX	IX	*X	IX	IX	IX	*X	IX	IX
Sec 34 T 14S R 14E SLBM	*X	IX	IX	IX	*X	IX	IX	IX	*X	IX	IX	IX	*X	IX	IX
Sec 01 T 15S R 13E SLBM	*				*										
Sec 02 T 15S R 13E SLBM	* 3.5000	7.9000	20.5000	4.1000*				2.3000*							
Sec 03 T 15S R 13E SLBM	*			*											
Sec 10 T 15S R 13E SLBM	*	29.6000		3.6000*11.7000	31.8000	1.1000						3.5000*			2
Sec 03 T 15S R 14E SLBM	*X	X	X	X	*X	X	X	X	*X	X	X	X	*X	X	X
Sec 04 T 15S R 14E SLBM	*X	X	X	X	*X	X	X	X	*X	X	X	X	*X	X	X
Sec 05 T 15S R 14E SLBM	* 4.4000				*				*				*		
Sec 06 T 15S R 14E SLBM	*		2.5000	14.3000*		0.2000	3.4000	7.2000*12.2000	9.3000			3.7000*24.2000	0.3000	16	

GROUP

=====

This Right (91-84) has an evaluated sole-supply total for irrigation of 0.0000 acres.

=====

This Right (91-84) is a member of 15 supplemental water right groups with irrigated acreage totaling 1583.4300 acres.

=====

Storage from 03/15 to 12/15, inclusive, in Grassy Trail Reservoir with a maximum capacity of 916.000 acre-feet, located in:

Height of Dam: 89 NORTH-WEST¼ NORTH-EAST¼ SOUTH-WEST¼ SOUTH-EAST¼

Area Inundated: NW NE SW SE NW NE SW SE NW NE SW SE NW NE SW SE

Sec 07 T 14S R 14E SLBM * X: X: X: X* * : : : * * X: X: : * * : : : *

Small Dam Required?: No

=====

OTHER COMMENTS*****

Also included in claim is Certificate Number a-525.

WUC 91-84 is limited to the irrigation requirements of 38.94 acres.

*****E N D O F D A T A*****

utah.gov Online Services Agency List Business

Utah Division of Water Rights

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Select Related Information

THIS RIGHT IS BEING PROTESTED IN A PROPOSED DETERMINATION BOOK!!!

(WARNING: Water Rights makes NO claims as to the accuracy of this data.) RUN DATE: 01/26/2011

WATER RIGHT: **91-114** APPLICATION/CLAIM NO.: **A11774** CERT. NO.: 2426
 CHANGES: a3409 Certificate a521 (Issued:)
a4235 Certificate a521 (Issued:)

OWNERSHIP*****

NAME: East Carbon City (Public Water Supplier)
 ADDR: 200 East Park Place
 East Carbon UT 84520
 INTEREST: 50% REMARKS:

NAME: Sunnyside City (Public Water Supplier)
 ADDR: P.O. Box 69
 Sunnyside UT 84539
 INTEREST: 50% REMARKS:

DATES, ETC.*****

LAND OWNED BY APPLICANT? COUNTY TAX ID#:
 FILED: 07/05/1935|PRIORITY: 07/05/1935|PUB BEGAN: |PUB ENDED: |NEWSPAPER:
 ProtestEnd: |PROTESTED: [No] |HEARING HLD: |SE ACTION: [Approved]|ActionDate:11/29/1935|PROOF DUE:
 EXTENSION: |ELEC/PROOF:[]|ELEC/PROOF: |CERT/WUC: 10/28/1970|LAP, ETC: |LAPS LETTER:
 RUSH LETTR: |RENOVATE: |RECON REQ: |TYPE: { }
 PD BOOK: [91-5] |MAP: [58c] |PUB DATE:
 *TYPE -- DOCUMENT -- STATUS

Type of Right: Application to Appropriate Source of Info: Proposed Determination Status: Water User's Claim

LOCATION OF WATER RIGHT***(Points of Diversion: Click on Location to access PLAT Program.)*******MAP VIEWER*******

FLOW: 1.8 cfs
 COUNTY: Carbon COMMON DESCRIPTION: SOURCE: Grassy Trail

POINTS OF DIVERSION -- SURFACE:

(1) S 2824 ft W 1166 ft from N4 cor, Sec 07, T 14S, R 14E, SLBM
 Diverting Works:
 (2) S 1163 ft W 644 ft from NE cor, Sec 18, T 14S, R 14E, SLBM
 Diverting Works:
 (3) N 1521 ft W 1983 ft from SE cor, Sec 29, T 14S, R 14E, SLBM
 Diverting Works:
 (4) S 1013 ft E 125 ft from W4 cor, Sec 01, T 15S, R 13E, SLBM
 Diverting Works:
 (5) N 1604 ft E 1245 ft from SW cor, Sec 02, T 15S, R 13E, SLBM
 Diverting Works:
 (6) N 750 ft W 1345 ft from SE cor, Sec 03, T 15S, R 13E, SLBM
 Diverting Works:
 (7) S 566 ft E 4323 ft from NW cor, Sec 09, T 15S, R 13E, SLBM
 Diverting Works:
 (8) S 1149 ft E 1320 ft from NW cor, Sec 09, T 15S, R 13E, SLBM
 Diverting Works:
 (9) N 91 ft E 2390 ft from W4 cor, Sec 06, T 15S, R 14E, SLBM
 Diverting Works:

Source:
 Source:
 Source:
 Source:
 Source:
 Source:
 Source:
 Source:
 Source:

Stream Alt Required?: No

USES OF WATER RIGHT***** ELU -- Equivalent Livestock Unit (cow, horse, etc.) ***** EDU -- Equivalent Domestic Unit or 1 Family

SUPPLEMENTAL GROUP NO.: **613926**. Water Rights Appurtenant to the following use(s):
91-28 (CERT), 84 (CERT), 100 (WUC), 114 (WUC), 118 (CERT),
125 (WUC), 141 (CERT), 158 (CERT), 360 (DEC), 361 (DEC)
362 (WUC), 363 (DEC), 367 (WUC), 368 (WUC), 369 (WUC)
372 (DEC)

IRRIGATION: Sole Supply: UNEVALUATED acres Group Total: 66.5 Div Limit: 266.0 acft. PERIOD OF USE: 06/15 TO 09/15
 Water User's Claim No. 100 is limited to the irrigation requirements of 6.54 acres.

###PLACE OF USE:	*-----NORTH WEST QUARTER-----*				*-----NORTH EAST QUARTER-----*				*-----SOUTH WEST QUARTER-----*				*-----SOUTH EAST QUARTER-----*			
	* NW	* NE	* SW	* SE	* NW	* NE	* SW	* SE	* NW	* NE	* SW	* SE	* NW	* NE	* SE	
Sec 03 T 15S R 13E SLBM	*				*				*				*			
Sec 10 T 15S R 13E SLBM	*		30.0000		*		36.5000		*				*			

***** GROUP

SUPPLEMENTAL GROUP NO.: **613974**. Water Rights Appurtenant to the following use(s):
91-28 (CERT), 84 (CERT), 114 (WUC), 118 (CERT), 125 (WUC)
141 (CERT), 158 (CERT), 360 (DEC), 361 (DEC), 362 (WUC)
363 (DEC), 367 (WUC), 368 (WUC), 369 (WUC), 372 (DEC)

IRRIGATION: Sole Supply: UNEVALUATED acres Group Total: 932.4 Div Limit: 3729.6 acft. PERIOD OF USE: 04/01 TO 10/31

###PLACE OF USE: *-----NORTH WEST QUARTER-----*-----NORTH EAST QUARTER-----*-----SOUTH WEST QUARTER-----*-----SOUTH EAST QUARTER-----*

	* NW	NE	SW	SE	* NW	NE	SW	SE	* NW	NE	SW	SE	* NW	NE	
Sec 24 T 15S R 12E SLBM	*				*	10.1000		6.6000*							
Sec 02 T 15S R 13E SLBM	*				*				*12.3000	14.0800	23.8300	34.2900*	21.9500		
Sec 03 T 15S R 13E SLBM	*				*									7.4000	2
Sec 07 T 15S R 13E SLBM	*				*									38.3000	39.5000
Sec 08 T 15S R 13E SLBM	*	39.6000		2.5000*	20.9500		31.0000	11.9000*	40.0000	40.0000	40.0000	40.0000*	4.5500		3
Sec 10 T 15S R 13E SLBM	*	8.0000													
Sec 11 T 15S R 13E SLBM	*	14.3000	0.2000	10.1000*		34.5000	3.2000								
Sec 17 T 15S R 13E SLBM	*		40.0000												
Sec 18 T 15S R 13E SLBM	*		31.5000	8.9000*	40.0000	40.0000		40.0000*		14.8000	7.7000	12.0000*			
Sec 19 T 15S R 13E SLBM	*	31.9000													
Sec 24 T 15S R 13E SLBM	*					10.1000		6.6000*							
Sec 06 T 15S R 14E SLBM	*				*				*11.2800						

GROUP

SUPPLEMENTAL GROUP NO.: **613975**. Water Rights Appurtenant to the following use(s):

91-28(CERT), 37(CERT), 84(CERT), 114(WUC), 118(CERT)
 125(WUC), 141(CERT), 158(CERT), 360(DEC), 361(DEC)
 362(WUC), 363(DEC), 367(WUC), 368(WUC), 369(WUC)
 372(DEC)

IRRIGATION: Sole Supply: UNEVALUATED acres Group Total: 102.85 Div Limit: 411.4 acft. PERIOD OF USE: 04/01 TO 10/31

###PLACE OF USE:

	*-----NORTH WEST QUARTER-----				*-----NORTH EAST QUARTER-----				*-----SOUTH WEST QUARTER-----				*-----SOUTH EAST		
	* NW	NE	SW	SE	* NW	NE	SW	SE	* NW	NE	SW	SE	* NW	NE	
Sec 19 T 15S R 12E SLBM	*				*				*				*		
Sec 24 T 15S R 12E SLBM	*				*				*		12.1000		*		
Sec 25 T 15S R 12E SLBM	*				*				*				*	3.7000	
Sec 19 T 15S R 13E SLBM	*				*	2.6500			*				*		
Sec 30 T 15S R 13E SLBM	*31.0000		22.2000	4.3000*					*		12.1000		6.2000*		

GROUP

SUPPLEMENTAL GROUP NO.: **613976**. Water Rights Appurtenant to the following use(s):

91-28(CERT), 84(CERT), 114(WUC), 118(CERT), 125(WUC)
 138(WUC), 141(CERT), 158(CERT), 360(DEC), 361(DEC)
 362(WUC), 363(DEC), 367(WUC), 368(WUC), 369(WUC)
 372(DEC)

IRRIGATION: Sole Supply: UNEVALUATED acres Group Total: 72.2 Div Limit: 288.8 acft. PERIOD OF USE: 04/01 TO 10/31

###PLACE OF USE:

	*-----NORTH WEST QUARTER-----				*-----NORTH EAST QUARTER-----				*-----SOUTH WEST QUARTER-----				*-----SOUTH EAST		
	* NW	NE	SW	SE	* NW	NE	SW	SE	* NW	NE	SW	SE	* NW	NE	
Sec 10 T 15S R 13E SLBM	*			19.0000*			30.2000	23.0000*					*		

GROUP

SUPPLEMENTAL GROUP NO.: **613977**. Water Rights Appurtenant to the following use(s):

91-28(CERT), 84(CERT), 114(WUC), 118(CERT), 125(WUC)
 141(CERT), 143(CERT), 145(CERT), 146(WUC), 158(CERT)
 159(CERT), 178(CERT), 360(DEC), 361(DEC), 362(WUC)
 363(DEC), 367(WUC), 368(WUC), 369(WUC), 372(DEC)

IRRIGATION: Sole Supply: UNEVALUATED acres Group Total: 15.63 Div Limit: 62.52 acft. PERIOD OF USE: 04/01 TO 10/31

###PLACE OF USE:

	*-----NORTH WEST QUARTER-----				*-----NORTH EAST QUARTER-----				*-----SOUTH WEST QUARTER-----				*-----SOUTH EAST		
	* NW	NE	SW	SE	* NW	NE	SW	SE	* NW	NE	SW	SE	* NW	NE	
Sec 17 T 15S R 14E SLBM	*				*				*	3.8000		5.8200	*		
Sec 18 T 15S R 14E SLBM	*				*				*		5.2100		0.8000*		

GROUP

SUPPLEMENTAL GROUP NO.: **613978**. Water Rights Appurtenant to the following use(s):

91-28(CERT), 84(CERT), 114(WUC), 118(CERT), 125(WUC)
 137(CERT), 141(CERT), 158(CERT), 360(DEC), 361(DEC)
 362(WUC), 363(DEC), 367(WUC), 368(WUC), 369(WUC)
 372(DEC)

IRRIGATION: Sole Supply: UNEVALUATED acres Group Total: 11.45 Div Limit: 45.8 acft. PERIOD OF USE: 04/01 TO 10/31

###PLACE OF USE:

	*-----NORTH WEST QUARTER-----				*-----NORTH EAST QUARTER-----				*-----SOUTH WEST QUARTER-----				*-----SOUTH EAST		
	* NW	NE	SW	SE	* NW	NE	SW	SE	* NW	NE	SW	SE	* NW	NE	
Sec 02 T 15S R 13E SLBM	*				*				*				*	11.4500	

GROUP

SUPPLEMENTAL GROUP NO.: **613979**. Water Rights Appurtenant to the following use(s):

91-28(CERT), 84(CERT), 114(WUC), 118(CERT), 125(WUC)
 140(CERT), 141(CERT), 142(CERT), 143(CERT), 145(CERT)
 146(WUC), 158(CERT), 159(CERT), 178(CERT), 360(DEC)
 361(DEC), 362(WUC), 363(DEC), 367(WUC), 368(WUC)
 369(WUC), 372(DEC)

IRRIGATION: Sole Supply: UNEVALUATED acres Group Total: 149.02 Div Limit: 582.56 acft. PERIOD OF USE: 04/01 TO 10/31

###PLACE OF USE:

	*-----NORTH WEST QUARTER-----				*-----NORTH EAST QUARTER-----				*-----SOUTH WEST QUARTER-----				*-----SOUTH EAST		
	* NW	NE	SW	SE	* NW	NE	SW	SE	* NW	NE	SW	SE	* NW	NE	
Sec 01 T 15S R 13E SLBM	*				*				*	19.4100	26.3100	6.5600	15.9300*	20.8800	8.6200
Sec 02 T 15S R 13E SLBM	*				*				*				*		126

GROUP

SUPPLEMENTAL GROUP NO.: **613980**. Water Rights Appurtenant to the following use(s):

91-19(CERT), 28(CERT), 84(CERT), 114(WUC), 118(CERT)
 120(CERT), 124(CERT), 125(WUC), 141(CERT), 143(CERT)
 145(CERT), 146(WUC), 158(CERT), 159(CERT), 178(CERT)
 360(DEC), 361(DEC), 362(WUC), 363(DEC), 367(WUC)
 368(WUC), 369(WUC), 372(DEC)

.....
 DOMESTIC: Sole Supply: UNEVALUATED EDUs Group Total: 105.0000 Div Limit: 76.44 acft. PERIOD OF USE: 01/01 TO 12/31
 Domestic uses in Columbia, Utah.

SUPPLEMENTAL GROUP NO.: 613981. Water Rights Appurtenant to the following use(s):

91-28(CERT), 84(CERT), 114(WUC), 118(CERT), 125(WUC)
139(CERT), 140(CERT), 141(CERT), 142(CERT), 143(CERT)
145(CERT), 146(WUC), 158(CERT), 159(CERT), 178(CERT)
360(DEC), 361(DEC), 362(WUC), 363(DEC), 367(WUC)
368(WUC), 369(WUC), 372(DEC)

.....
 DOMESTIC: Sole Supply: UNEVALUATED EDUs Group Total: 770.0000 Div Limit: 560.56 acft. PERIOD OF USE: 01/01 TO 12/31
 Flow for domestic is part of flow for irrigation. Domestic use at unincorporated areas at
 Sunnyside and East Carbon.

SUPPLEMENTAL GROUP NO.: 613983. Water Rights Appurtenant to the following use(s):

91-19(CERT), 28(CERT), 84(CERT), 99(CERT), 114(WUC)
118(CERT), 125(WUC), 141(CERT), 143(CERT), 145(CERT)
146(WUC), 158(CERT), 159(CERT), 178(CERT), 332(UGWC)
360(DEC), 361(DEC), 362(WUC), 363(DEC), 367(WUC)
368(WUC), 369(WUC), 372(DEC)

.....
 MINING: DISTRICT: Columbia NAME: Columbia PERIOD OF USE: 01/01 TO 12/31
 ORES: coal

Acre Feet Contributed by this Right for this Use: Unevaluated

SUPPLEMENTAL GROUP NO.: 613984. Water Rights Appurtenant to the following use(s):

91-28(CERT), 84(CERT), 114(WUC), 118(CERT), 125(WUC)
141(CERT), 143(CERT), 145(CERT), 158(CERT), 159(CERT)
360(DEC), 361(DEC), 362(WUC), 363(DEC), 367(WUC)
368(WUC), 369(WUC), 372(DEC)

.....
 MINING: DISTRICT: Sunnyside NAME: Sunnyside PERIOD OF USE: 01/01 TO 12/31
 ORES: coal

Acre Feet Contributed by this Right for this Use: Unevaluated

SUPPLEMENTAL GROUP NO.: 613985. Water Rights Appurtenant to the following use(s):

91-28(CERT), 84(CERT), 114(WUC), 118(CERT), 125(WUC)
141(CERT), 143(CERT), 145(CERT), 146(WUC), 148(CERT)
149(CERT), 150(CERT), 158(CERT), 159(CERT), 178(CERT)
183(CERT), 360(DEC), 361(DEC), 362(WUC), 363(DEC)
367(WUC), 368(WUC), 369(WUC), 372(DEC)

.....
 MINING: DISTRICT: Columbia NAME: Horse Canyon PERIOD OF USE: 01/01 TO 12/31
 ORES: Coal

Acre Feet Contributed by this Right for this Use: Unevaluated

Administratively changed on Feb 14, 2007, by deleting the Domestic entry for 800 persons, and
 adding it to this Mining entry. The Mining was to employ and/or service the 800 persons.

.....
 INDUSTRIAL: In conjunction with the coal mining occurring at Horse Canyon. PERIOD OF USE: 01/01 TO 12/31
 Acre Feet Contributed by this Right for this Use: Unevaluated

SUPPLEMENTAL GROUP NO.: 614007. Water Rights Appurtenant to the following use(s):

91-28(CERT), 84(CERT), 114(WUC), 118(CERT), 125(WUC)
141(CERT), 146(WUC), 158(CERT), 360(DEC), 361(DEC)
362(WUC), 363(DEC), 367(WUC), 368(WUC), 369(WUC)

utah.gov Online Services Agency List Business

Utah Division of Water Rights

Search

Select Related Information

(WARNING: Water Rights makes NO claims as to the accuracy of this data.) RUN DATE: 01/26/2011

WATER RIGHT: 91-118 APPLICATION/CLAIM NO.: A12554 CERT. NO.: 4137
 CHANGES: a3442 Certificate a532 (Issued:)
 a4248 Certificate a532 (Issued:)

OWNERSHIP*****

NAME: Sunnyside Cogeneration Associates (Public Water Supplier)
 ADDR: c/o Plant Manager
 P.O. Box 159
 Sunnyside UT 84539
 INTEREST: 100% REMARKS:

DATES, ETC.*****

LAND OWNED BY APPLICANT? COUNTY TAX ID#: FILED: 11/05/1937 PRIORITY: 11/05/1937 PUB BEGAN: |PUB ENDED: |NEWSPAPER:
 ProtestEnd: |PROTESTED: [No] |HEARING HLD: |SE ACTION: [Approved] |ActionDate: 07/09/1938 |PROOF DUE:
 EXTENSION: |ELEC/PROOF: [] |ELEC/PROOF: |CERT/WUC: 03/26/1971 |LAP, ETC: |LAPS LETTER:
 RUSH LETTR: |RENOVATE: |RECON REQ: |TYPE: []
 PD BOOK: [91-5] |MAP: [58c] |PUB DATE:
 *TYPE -- DOCUMENT -- STATUS--

Type of Right: Application to Appropriate Source of Info: Proposed Determination Status: Certificate

LOCATION OF WATER RIGHT***(Points of Diversion: Click on Location to access PLAT Program.)*****MAP VIEWER*****

FLOW: 5.0 cfs SOURCE: Grassy Trail Creek
 COUNTY: Carbon COMMON DESCRIPTION:

POINTS OF DIVERSION -- SURFACE:

(1) S 2824 ft W 1166 ft from N4 cor, Sec 07, T 14S, R 14E, SLBM
 Diverting Works:
 (2) S 1163 ft W 644 ft from NE cor, Sec 18, T 14S, R 14E, SLBM
 Diverting Works:
 (3) N 1521 ft W 1983 ft from SE cor, Sec 29, T 14S, R 14E, SLBM
 Diverting Works:
 (4) S 1013 ft E 125 ft from W4 cor, Sec 01, T 15S, R 13E, SLBM
 Diverting Works:
 (5) N 1604 ft E 1245 ft from SW cor, Sec 02, T 15S, R 13E, SLBM
 Diverting Works:
 (6) N 750 ft W 1345 ft from SE cor, Sec 03, T 15S, R 13E, SLBM
 Diverting Works:
 (7) S 566 ft E 4323 ft from NW cor, Sec 09, T 15S, R 13E, SLBM
 Diverting Works:
 (8) S 1149 ft E 1320 ft from NW cor, Sec 09, T 15S, R 13E, SLBM
 Diverting Works:
 (9) N 91 ft E 2390 ft from W4 cor, Sec 06, T 15S, R 14E, SLBM
 Diverting Works:

Source:

Source:

Source:

Source:

Source:

Source:

Source:

Source:

Source:

Stream Alt Required?: No

USES OF WATER RIGHT***** ELU -- Equivalent Livestock Unit (cow, horse, etc.) ***** EDU -- Equivalent Domestic Unit or 1 Family

SUPPLEMENTAL GROUP NO.: 613926. Water Rights Appurtenant to the following use(s):
 91-28(CERT), 84(CERT), 100(WUC), 114(WUC), 118(CERT)
 125(WUC), 141(CERT), 158(CERT), 360(DEC), 361(DEC)
 362(WUC), 363(DEC), 367(WUC), 368(WUC), 369(WUC)
 372(DEC)

IRRIGATION: Sole Supply: UNEVALUATED acres Group Total: 66.5 Div Limit: 266.0 acft. PERIOD OF USE: 06/15 TO 09/15
 Water User's Claim No. 100 is limited to the irrigation requirements of 6.54 acres.

###PLACE OF USE:	NORTH WEST QUARTER				NORTH EAST QUARTER				SOUTH WEST QUARTER				SOUTH EAST	
	NW	NE	SW	SE	NW	NE	SW	SE	NW	NE	SW	SE	NW	NE
Sec 03 T 15S R 13E SLBM														
Sec 10 T 15S R 13E SLBM		30.0000			36.5000									

GROUP

SUPPLEMENTAL GROUP NO.: 613974. Water Rights Appurtenant to the following use(s):
 91-28(CERT), 84(CERT), 114(WUC), 118(CERT), 125(WUC)
 141(CERT), 158(CERT), 360(DEC), 361(DEC), 362(WUC)
 363(DEC), 367(WUC), 368(WUC), 369(WUC), 372(DEC)

IRRIGATION: Sole Supply: UNEVALUATED acres Group Total: 932.4 Div Limit: 3729.6 acft. PERIOD OF USE: 04/01 TO 10/31

###PLACE OF USE:	NORTH WEST QUARTER				NORTH EAST QUARTER				SOUTH WEST QUARTER				SOUTH EAST	
	NW	NE	SW	SE	NW	NE	SW	SE	NW	NE	SW	SE	NW	NE
Sec 24 T 15S R 12E SLBM						10.1000		6.6000						
Sec 02 T 15S R 13E SLBM									12.3000	14.0800	23.8300	34.2900	21.9500	
Sec 03 T 15S R 13E SLBM														
Sec 07 T 15S R 13E SLBM														7.4000
Sec 08 T 15S R 13E SLBM		39.6000		2.5000	20.9500		31.0000	11.9000	40.0000	40.0000	40.0000	40.0000	4.5500	38.3000
Sec 10 T 15S R 13E SLBM	8.0000		0.2000	10.1000		34.5000	3.2000							39.5000
Sec 11 T 15S R 13E SLBM	14.3000													40

[illegible]

GROUP

SUPPLEMENTAL GROUP NO.: 613975. Water Rights Appurtenant to the following use(s):

91-28 (CERT), 37 (CERT), 84 (CERT), 114 (WUC), 118 (CERT)
125 (WUC), 141 (CERT), 158 (CERT), 360 (DEC), 361 (DEC)
362 (WUC), 363 (DEC), 367 (WUC), 368 (WUC), 369 (WUC)
372 (DEC).

IRRIGATION: Sole Supply: UNEVALUATED acres Group Total: 102.85 Div Limit: 411.4 acft. PERIOD OF USE: 04/01 TO 10/31

###PLACE OF USE:				*-----NORTH WEST QUARTER-----*				*-----NORTH EAST QUARTER-----*				*-----SOUTH WEST QUARTER-----*				*-----SOUTH EAST QUARTER-----*	
Sec	T	R	SLBM	NW	NE	SW	SE	NW	NE	SW	SE	NW	NE	SW	SE	NW	NE
Sec 19	T 15S	R 12E	SLBM	*				*				*				*	
Sec 24	T 15S	R 12E	SLBM	*				*				*		12.1000		*	
Sec 25	T 15S	R 12E	SLBM	*				*				*				*	
Sec 19	T 15S	R 13E	SLBM	*				*	2.6500			*				*	3.7000
Sec 30	T 15S	R 13E	SLBM	*31.0000		22.2000	4.3000	*				*		12.1000		*	
													4.7000		6.2000	*	

GROUP

SUPPLEMENTAL GROUP NO.: 613976. Water Rights Appurtenant to the following use(s):
91-28(CERT) 84(CERT) 114(ENG) 110(CERT) 100(WAT)

91-28 (CERT), 84 (CERT), 114 (WUC), 118 (CERT), 125 (WUC)
138 (WUC), 141 (CERT), 158 (CERT), 360 (DEC), 361 (DEC)
362 (WUC), 363 (DEC), 367 (WUC), 368 (WUC), 369 (WUC)
372 (DEC)

IRRIGATION: Sole Supply: UNEVALUATED acres Group Total: 72.2 Div Limit: 288.8 acft. PERIOD OF USE: 04/01 TO 10/31

###PLACE OF USE:															
NORTH WEST QUARTER				NORTH EAST QUARTER				SOUTH WEST QUARTER				SOUTH EAST			
NW	NE	SW	SE	NW	NE	SW	SE	NW	NE	SW	SE	NW	NE	SW	SE
Sec 10 T 15S R 13E SLBM			19.0000				30.2000	23.0000							

GROUP

SUPPLEMENTAL GROUP NO.: 613977. Water Rights Appurtenant to the following use(s):
81-28 (CERF), 84 (CERF), 11 (WATER)

91-28 (CERT), 84 (CERT), 114 (WUC), 118 (CERT), 125 (WUC)
141 (CERT), 143 (CERT), 145 (CERT), 146 (WUC), 158 (CERT)
159 (CERT), 178 (CERT), 360 (DEC), 361 (DEC), 362 (WUC)
363 (DEC), 367 (WUC), 368 (WUC), 369 (WUC), 372 (DEC)

IRRIGATION: Sole Supply; UNEVALUATED acres Group Total: 15.63 Div Limit: 62.52 acft. PERIOD OF USE: 04/01 TO 10/31

###PLACE OF USE:													
-----NORTH WEST QUARTER-----				*-----NORTH EAST QUARTER-----*				*-----SOUTH WEST QUARTER-----*				*-----SOUTH EAST	
* NW	NE	SW	SE *	* NW	NE	SW	SE	* NW	NE	SW	SE *	* NW	NE
Sec 17 T 15S R 14E S1B1				*					3.8000		5.8200	*	
Sec 18 T 15S R 14E S1B1				*						5.2100		0.8000	*

GROUP

SUPPLEMENTAL GROUP NO.: 613978. Water Rights Appurtenant to the following use(s):

91-28 (CERT), 84 (CERT), 114 (WUC), 118 (CERT), 125 (WUC)
137 (CERT), 141 (CERT), 158 (CERT), 360 (DEC), 361 (DEC)
362 (WUC), 363 (DEC), 367 (WUC), 368 (WUC), 369 (WUC)
372 (DEC)

IRRIGATION: Sole Supply; UNEVALUATED acres Group Total: 11.45 Div Limit: 45.8 acft. PERIOD OF USE: 04/01 TO 10/31

###PLACE OF USE:

	NORTH WEST QUARTER				NORTH EAST QUARTER				SOUTH WEST QUARTER				SOUTH EAST	
	NW	NE	SW	SE	NW	NE	SW	SE	NW	NE	SW	SE	NW	NE
Sec. 02 T 15S R 13E SLBM					*				*				*	

GROUP

SUPPLEMENTAL GROUP NO.: 613979. Water Rights Appurtenant to the following use(s):

91-28 (CERT), 84 (CERT), 114 (WUC), 118 (CERT), 125 (WUC),
140 (CERT), 141 (CERT), 142 (CERT), 143 (CERT), 145 (CERT)
146 (WUC), 158 (CERT), 159 (CERT), 178 (CERT), 360 (DEC)
361 (DEC), 362 (WUC), 363 (DEC), 367 (WUC), 368 (WUC)
369 (WUC), 372 (DEC)

IRRIGATION: Sole Supply: UNEVALUATED acres Group Total: 149.02 Div Limit: 582.56 acft. PERIOD OF USE: 04/01 TO 10/31

####PLACE OF USE: *-----NORTH WEST QUARTER-----*-----NORTH EAST QUARTER-----*-----SOUTH WEST QUARTER-----*-----SOUTH EAST

	* NW	* NE	* SW	* SE	* NW	* NE	* SW	* SE	* NW	* NE	* SW	* SE	* NW	* NE	* SW	* SE
Sec 01 T 15S R 13E SLBM																
Sec 02 T 15S R 13E SLBM									*19.4100	*26.3100	*6.5600	*15.9300	*20.8800	*8.6200	*8	*126

GROUP

SUPPLEMENTAL GROUP NO.: 613980. Water Rights Appurtenant to the following use(s):

91-19 (CERT), 28 (CERT), 84 (CERT), 114 (WUC), 118 (CERT)
 120 (CERT), 124 (CERT), 125 (WUC), 141 (CERT), 143 (CERT)
 145 (CERT), 146 (WUC), 158 (CERT), 159 (CERT), 178 (CERT)
 360 (DEC), 361 (DEC), 362 (WUC), 363 (DEC), 367 (WUC)
 368 (WUC), 369 (WUC), 372 (DEC)

DOMESTIC: Sole Supply: UNEVALUATED EDUs Group Total: 105.0000 Div Limit: 76.44 acft. PERIOD OF USE: 01/01 TO 12/31
Domestic uses in Columbia, Utah

SUPPLEMENTAL GROUP NO.: 613981. Water Rights Appurtenant to the following use(s):
01-28-(CREEK) 04-(FEDS) 05-(MUN)

91-28 (CERT), 84 (CERT), 114 (WUC), 118 (CERT), 125 (WUC)
139 (CERT), 140 (CERT), 141 (CERT), 142 (CERT), 143 (CERT)
145 (CERT), 146 (WUC), 158 (CERT), 159 (CERT), 178 (CERT)

360 (DEC), 361 (DEC), 362 (WUC), 363 (DEC), 367 (WUC)
368 (WUC), 369 (WUC), 372 (DEC)

DOMESTIC: Sole Supply: UNEVALUATED EDUS Group Total: 770.0000 Div Limit: 560.56 acft. PERIOD OF USE: 01/01 TO 12/31
 Flow for domestic is part of flow for irrigation. Domestic use at unincorporated areas at Sunnyside and East Carbon.

SUPPLEMENTAL GROUP NO.: 613983. Water Rights Appurtenant to the following use(s):

91-19 (CERT), 28 (CERT), 84 (CERT), 99 (CERT), 114 (WUC)
118 (CERT), 125 (WUC), 141 (CERT), 143 (CERT), 145 (CERT)
146 (WUC), 158 (CERT), 159 (CERT), 178 (CERT), 332 (UGWC)
360 (DEC), 361 (DEC), 362 (WUC), 363 (DEC), 367 (WUC)
368 (WUC), 369 (WUC), 372 (DEC)

MINING: DISTRICT: Columbia NAME: Columbia PERIOD OF USE: 01/01 TO 12/31
 ORES: coal

Acre Feet Contributed by this Right for this Use: Unevaluated

SUPPLEMENTAL GROUP NO.: 613984. Water Rights Appurtenant to the following use(s):

91-28 (CERT), 84 (CERT), 114 (WUC), 118 (CERT), 125 (WUC)
141 (CERT), 143 (CERT), 145 (CERT), 158 (CERT), 159 (CERT)
360 (DEC), 361 (DEC), 362 (WUC), 363 (DEC), 367 (WUC)
368 (WUC), 369 (WUC), 372 (DEC)

MINING: DISTRICT: Sunnyside NAME: Sunnyside PERIOD OF USE: 01/01 TO 12/31
 ORES: coal

Acre Feet Contributed by this Right for this Use: Unevaluated

SUPPLEMENTAL GROUP NO.: 613985. Water Rights Appurtenant to the following use(s):

91-28 (CERT), 84 (CERT), 114 (WUC), 118 (CERT), 125 (WUC)
141 (CERT), 143 (CERT), 145 (CERT), 146 (WUC), 148 (CERT)
149 (CERT), 150 (CERT), 158 (CERT), 159 (CERT), 178 (CERT)
183 (CERT), 360 (DEC), 361 (DEC), 362 (WUC), 363 (DEC)
367 (WUC), 368 (WUC), 369 (WUC), 372 (DEC)

MINING: DISTRICT: Columbia NAME: Horse Canyon PERIOD OF USE: 01/01 TO 12/31
 ORES: Coal

Acre Feet Contributed by this Right for this Use: Unevaluated

Administratively changed on Feb 14, 2007, by deleting the Domestic entry for 800 persons, and adding it to this Mining entry. The Mining was to employ and/or service the 800 persons.

INDUSTRIAL: In conjunction with the coal mining occurring at Horse Canyon. PERIOD OF USE: 01/01 TO 12/31
 Acre Feet Contributed by this Right for this Use: Unevaluated

SUPPLEMENTAL GROUP NO.: 614007. Water Rights Appurtenant to the following use(s):

91-28 (CERT), 84 (CERT), 114 (WUC), 118 (CERT), 125 (WUC)
141 (CERT), 146 (WUC), 158 (CERT), 360 (DEC), 361 (DEC)
362 (WUC), 363 (DEC), 367 (WUC), 368 (WUC), 369 (WUC)
372 (DEC)

IRRIGATION: Sole Supply: UNEVALUATED acres Group Total: 11.28 Div Limit: 45.12 acft. PERIOD OF USE: 04/01 TO 10/15

##PLACE OF USE:	NORTH WEST QUARTER				NORTH EAST QUARTER				SOUTH WEST QUARTER				SOUTH EAST				
	NW	NE	SW	SE	NW	NE	SW	SE	NW	NE	SW	SE	NW	NE	SW	SE	
Sec 06 T 15S R 14E SLBM	*				*				*				*				
									11.2800								
																	GROUP

SUPPLEMENTAL GROUP NO.: 614158. Water Rights Appurtenant to the following use(s):

91-28 (CERT), 84 (CERT), 114 (WUC), 118 (CERT), 125 (WUC)
141 (CERT), 143 (CERT), 144 (CERT), 145 (CERT), 146 (WUC)
158 (CERT), 178 (CERT), 239 (APP), 360 (DEC), 361 (DEC)
362 (WUC), 363 (DEC), 367 (WUC), 368 (WUC), 369 (WUC)
372 (DEC)

MUNICIPAL: Sunnyside PERIOD OF USE: 01/01 TO 12/31
 Acre Feet Contributed by this Right for this Use: Unevaluated

SUPPLEMENTAL GROUP NO.: 615817. Water Rights Appurtenant to the following use(s):

91-37 (CERT), 99 (CERT), 118 (CERT), 139 (CERT), 143 (CERT)
145 (CERT), 158 (CERT), 159 (CERT), 361 (DEC), 364 (DEC)
372 (DEC), 3522 (DIL), 3524 (DIL), 3761 (DIL), 4941 (UNAP)
4942 (WD)

POWER: SCA Steam Generation Power Plant, rated at 58 MW. PERIOD OF USE: 01/01 TO 12/31
 CFS Contributed by this Right for this Use: Unevaluated

##PLACE OF USE:	NORTH WEST QUARTER				NORTH EAST QUARTER				SOUTH WEST QUARTER				SOUTH EAST				
	NW	NE	SW	SE	NW	NE	SW	SE	NW	NE	SW	SE	NW	NE	SW	SE	
Sec 06 T 15S R 14E SLBM	*				*				*				*				
													X		X		X
													X				GROUP

This Right (91-118) has an evaluated sole-supply total for irrigation of 0.0000 acres.

This Right (91-118) is a member of 15 supplemental water right groups with irrigated acreage totaling 1361.3300 acres.

Storage from 03/15 to 12/15, inclusive, in Grassy Trail Reservoir with a maximum capacity of 916.000 acre-feet, located in:

Height of Dam:	NORTH-WEST ⁴	NORTH-EAST ⁴	SOUTH-WEST ⁴	SOUTH-EAST ⁴
Area Inundated:	NW NE SW SE	NW NE SW SE	NW NE SW SE	NW NE SW SE
Sec 07 T 14S R 14E SLBM	* : : *	* : : *	* X : : *	* : : *

Small Dam Required?: No

=====

OTHER COMMENTS*****

Also included in this claim is Certificate Number a-532.
WUC No. 91-118 is limited to the irrigation requirements of 43.0 acres.

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THIS RIGHT IS BEING PROTESTED IN A PROPOSED DETERMINATION BOOK!!!!

(WARNING: Water Rights makes NO claims as to the accuracy of this data.) RUN DATE: 01/26/2011

WATER RIGHT: **91-125** APPLICATION/CLAIM NO.: **A13333** CERT. NO.: 7765
 CHANGES: a3408 Certificate 7765 (Issued:)
 a4234 Certificate 7765 (Issued:)

OWNERSHIP*****

NAME: East Carbon City (Public Water Supplier)
 ADDR: 200 East Park Place
 East Carbon UT 84520
 INTEREST: 50% REMARKS:

NAME: Sunnyside City (Public Water Supplier)
 ADDR: P.O. Box 69
 Sunnyside UT 84539
 INTEREST: 50% REMARKS:

DATES, ETC.*****

LAND OWNED BY APPLICANT? COUNTY TAX ID#:
 FILED: 02/13/1940 PRIORITY: 02/13/1940 PUB BEGAN: | PUB ENDED: | NEWSPAPER:
 ProtestEnd: | PROTESTED: [No] | HEARING HLD: | SE ACTION: [Approved] | ActionDate: 09/20/1940 | PROOF DUE:
 EXTENSION: | ELEC/PROOF: [] | ELEC/PROOF: | CERT/WUC: 10/28/1970 | LAP, ETC: | LAPS LETTER:
 RUSH LETTR: | RENOVATE: | RECON REQ: | TYPE: []
 PD BOOK: [91-5] | MAP: [58c] | PUB DATE:
 *TYPE -- DOCUMENT -- STATUS--

Type of Right: Application to Appropriate Source of Info: Proposed Determination Status: Water User's Claim

LOCATION OF WATER RIGHT***(Points of Diversion: Click on Location to access PLAT Program.)*****[MAP VIEWER](#)*****

FLOW: 5.0 cfs SOURCE: Grassy Trail Creek
 COUNTY: Carbon COMMON DESCRIPTION:

POINTS OF DIVERSION -- SURFACE:

- (1) S 2824 ft W 1166 ft from N4 cor, Sec 07, T 14S, R 14E, SLBM
 Diverting Works: Source:
- (2) S 1163 ft W 644 ft from NE cor, Sec 18, T 14S, R 14E, SLBM
 Diverting Works: Source:
- (3) N 1521 ft W 1983 ft from SE cor, Sec 29, T 14S, R 14E, SLBM
 Diverting Works: Source:
- (4) S 1013 ft E 125 ft from W4 cor, Sec 01, T 15S, R 13E, SLBM
 Diverting Works: Source:
- (5) N 750 ft W 1345 ft from SE cor, Sec 02, T 15S, R 13E, SLBM
 Diverting Works: Source:
- (6) N 1604 ft E 1245 ft from SW cor, Sec 02, T 15S, R 13E, SLBM
 Diverting Works: Source:
- (7) S 566 ft E 4323 ft from NW cor, Sec 09, T 15S, R 13E, SLBM
 Diverting Works: Source:
- (8) S 1149 ft E 1320 ft from NW cor, Sec 09, T 15S, R 13E, SLBM
 Diverting Works: Source:
- (9) N 91 ft E 2390 ft from W4 cor, Sec 06, T 15S, R 14E, SLBM
 Diverting Works: Source:

Stream Alt Required?: No

USES OF WATER RIGHT***** ELU -- Equivalent Livestock Unit (cow, horse, etc.) ***** EDU -- Equivalent Domestic Unit or 1 Family

SUPPLEMENTAL GROUP NO.: **613926**. Water Rights Appurtenant to the following use(s):
 91-28 (CERT), 84 (CERT), 100 (WUC), 114 (WUC), 118 (CERT),
 125 (WUC), 141 (CERT), 158 (CERT), 360 (DEC), 361 (DEC),
 362 (WUC), 363 (DEC), 367 (WUC), 368 (WUC), 369 (WUC),
 372 (DEC)

IRRIGATION: Sole Supply: UNEVALUATED acres Group Total: 66.5 Div Limit: 266.0 acft. PERIOD OF USE: 06/15 TO 09/15
 Water User's Claim No. 100 is limited to the irrigation requirements of 6.54 acres.

###PLACE OF USE:

	NORTH WEST QUARTER				NORTH EAST QUARTER				SOUTH WEST QUARTER				SOUTH EAST			
	NW	NE	SW	SE	NW	NE	SW	SE	NW	NE	SW	SE	NW	NE		
Sec 03 T 15S R 13E SLBM																
Sec 10 T 15S R 13E SLBM		30.0000			36.5000											

GROUP

SUPPLEMENTAL GROUP NO.: **613974**. Water Rights Appurtenant to the following use(s):
 91-28 (CERT), 84 (CERT), 114 (WUC), 118 (CERT), 125 (WUC),
 141 (CERT), 158 (CERT), 360 (DEC), 361 (DEC), 362 (WUC),
 363 (DEC), 367 (WUC), 368 (WUC), 369 (WUC), 372 (DEC)

IRRIGATION: Sole Supply: UNEVALUATED acres Group Total: 932.4 Div Limit: 3729.6 acft. PERIOD OF USE: 04/01 TO 10/31

###PLACE OF USE:

	NORTH WEST QUARTER				NORTH EAST QUARTER				SOUTH WEST QUARTER				SOUTH EAST			
--	--------------------	--	--	--	--------------------	--	--	--	--------------------	--	--	--	------------	--	--	--

	* NW	NE	SW	SE	* NW	NE	SW	SE	* NW	NE	SW	SE	* NW	NE	
Sec 24 T 15S R 12E SLBM	*				*	10.1000		6.6000*							
Sec 02 T 15S R 13E SLBM	*				*				*12.3000	14.0800	23.8300	34.2900*	21.9500		
Sec 03 T 15S R 13E SLBM	*				*				*						
Sec 07 T 15S R 13E SLBM	*				*				*						
Sec 08 T 15S R 13E SLBM	*				*				*						
Sec 10 T 15S R 13E SLBM	*	8.0000		0.2000	10.1000*		31.0000	11.9000*	40.0000	40.0000	40.0000	40.0000*	4.5500		3
Sec 11 T 15S R 13E SLBM	*	14.3000					34.5000	3.2000	*						
Sec 17 T 15S R 13E SLBM	*			40.0000	*				*						
Sec 18 T 15S R 13E SLBM	*			31.5000	8.9000*	40.0000	40.0000		40.0000*	14.8000	7.7000	12.0000*			
Sec 19 T 15S R 13E SLBM	*	31.9000							*						
Sec 24 T 15S R 13E SLBM	*					10.1000		6.6000*							
Sec 06 T 15S R 14E SLBM	*				*				*11.2800						

GROUP

SUPPLEMENTAL GROUP NO.: **613975**. Water Rights Appurtenant to the following use(s):

91-28(CERT), 37(CERT), 84(CERT), 114(WUC), 118(CERT),
125(WUC), 141(CERT), 158(CERT), 360(DEC), 361(DEC)
362(WUC), 363(DEC), 367(WUC), 368(WUC), 369(WUC)
372(DEC)

IRRIGATION: Sole Supply: UNEVALUATED acres Group Total: 102.85 Div Limit: 411.4 acft. PERIOD OF USE: 04/01 TO 10/31

###PLACE OF USE:	*-----NORTH WEST QUARTER-----				*-----NORTH EAST QUARTER-----				*-----SOUTH WEST QUARTER-----				*-----SOUTH EAST		
	* NW	NE	SW	SE	* NW	NE	SW	SE	* NW	NE	SW	SE	* NW	NE	
Sec 19 T 15S R 12E SLBM	*				*				*				*		
Sec 24 T 15S R 12E SLBM	*				*				*		12.1000		*		
Sec 25 T 15S R 12E SLBM	*				*				*				*		
Sec 19 T 15S R 13E SLBM	*				*	2.6500			*				*		
Sec 30 T 15S R 13E SLBM	*	31.0000		22.2000	4.3000*				*	4.7000		6.2000*			

GROUP

SUPPLEMENTAL GROUP NO.: **613976**. Water Rights Appurtenant to the following use(s):

91-28(CERT), 84(CERT), 114(WUC), 118(CERT), 125(WUC),
138(WUC), 141(CERT), 158(CERT), 360(DEC), 361(DEC)
362(WUC), 363(DEC), 367(WUC), 368(WUC), 369(WUC)
372(DEC)

IRRIGATION: Sole Supply: UNEVALUATED acres Group Total: 72.2 Div Limit: 288.8 acft. PERIOD OF USE: 04/01 TO 10/31

###PLACE OF USE:	*-----NORTH WEST QUARTER-----				*-----NORTH EAST QUARTER-----				*-----SOUTH WEST QUARTER-----				*-----SOUTH EAST		
	* NW	NE	SW	SE	* NW	NE	SW	SE	* NW	NE	SW	SE	* NW	NE	
Sec 10 T 15S R 13E SLBM	*			19.0000*			30.2000	23.0000*					*		

GROUP

SUPPLEMENTAL GROUP NO.: **613977**. Water Rights Appurtenant to the following use(s):

91-28(CERT), 84(CERT), 114(WUC), 118(CERT), 125(WUC),
141(CERT), 143(CERT), 145(CERT), 146(WUC), 158(CERT),
159(CERT), 178(CERT), 360(DEC), 361(DEC), 362(WUC),
363(DEC), 367(WUC), 368(WUC), 369(WUC), 372(DEC)

IRRIGATION: Sole Supply: UNEVALUATED acres Group Total: 15.63 Div Limit: 62.52 acft. PERIOD OF USE: 04/01 TO 10/31

###PLACE OF USE:	*-----NORTH WEST QUARTER-----				*-----NORTH EAST QUARTER-----				*-----SOUTH WEST QUARTER-----				*-----SOUTH EAST		
	* NW	NE	SW	SE	* NW	NE	SW	SE	* NW	NE	SW	SE	* NW	NE	
Sec 17 T 15S R 14E SLBM	*				*				*	3.8000			*		
Sec 18 T 15S R 14E SLBM	*				*				*		5.2100	5.8200	*		

GROUP

SUPPLEMENTAL GROUP NO.: **613978**. Water Rights Appurtenant to the following use(s):

91-28(CERT), 84(CERT), 114(WUC), 118(CERT), 125(WUC),
137(CERT), 141(CERT), 158(CERT), 360(DEC), 361(DEC),
362(WUC), 363(DEC), 367(WUC), 368(WUC), 369(WUC),
372(DEC)

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(WARNING: Water Rights makes NO claims as to the accuracy of this data.) RUN DATE: 01/26/2011

WATER RIGHT: **91-140** APPLICATION/CLAIM NO.: **A15617** CERT. NO.: 5520
CHANGES: **a2597** Certificate 5520 (Issued:)

OWNERSHIP*****

NAME: East Carbon City
ADDR: P.O. Box 70
East Carbon UT 84520
INTEREST: 100% REMARKS:

DATES, ETC.*****

LAND OWNED BY APPLICANT? COUNTY TAX ID#:
FILED: 12/18/1943 PRIORITY: 12/18/1943 PUB BEGAN: |PUB ENDED: |NEWSPAPER:
ProtestEnd: |PROTESTED: [No] |HEARING HLD: |SE ACTION: [Approved] |ActionDate: 04/28/1945 |PROOF DUE:
EXTENSION: |ELEC/PROOF: [] |ELEC/PROOF: |CERT/WUC: 03/25/1971 |LAP, ETC: |LAPS LETTER:
RUSH LETTR: |RENOVATE: |RECON REQ:
PD BOOK: [91-5] |MAP: [58c] |PUB DATE: |TYPE: []
*TYPE -- DOCUMENT -- STATUS--

Type of Right: Application to Appropriate Source of Info: Proposed Determination Status: Certificate

LOCATION OF WATER RIGHT*** (Points of Diversion: Click on Location to access PLAT Program.) ***** **MAP VIEWER** *****

FLOW: 50.0 acre-feet SOURCE: Grassy Trail Creek
COUNTY: Carbon COMMON DESCRIPTION:

POINT OF DIVERSION -- SURFACE:
(1) S 2824 ft W 1166 ft from NE cor, Sec 12, T 14S, R 13E, SLBM
Diverting Works:

Source:

Stream Alt Required?: No

POINTS OF REDIVERSION:
(1) S 1163 ft W 645 ft from NE cor, Sec 18, T 14S, R 14E, SLBM
Diverting Works:
(2) N 1521 ft W 1983 ft from SE cor, Sec 29, T 14S, R 14E, SLBM
Diverting Works:
(3) S 1013 ft E 125 ft from W4 cor, Sec 01, T 15S, R 13E, SLBM
Diverting Works:
(4) N 91 ft E 2391 ft from W4 cor, Sec 06, T 15S, R 14E, SLBM
Diverting Works:

Source:

Source:

Source:

Source:

USES OF WATER RIGHT***** ELU -- Equivalent Livestock Unit (cow, horse, etc.) ***** EDU -- Equivalent Domestic Unit or 1 Family

SUPPLEMENTAL GROUP NO.: **613979**. Water Rights Appurtenant to the following use(s):
91-28(CERT), 84(CERT), 114(WUC), 118(CERT), 125(WUC)
140(CERT), 141(CERT), 142(CERT), 143(CERT), 145(CERT)
146(WUC), 158(CERT), 159(CERT), 178(CERT), 360(DEC)

368(WUC), 369(WUC), 372(DEC)

DOMESTIC: Sole Supply: UNEVALUATED EDUs Group Total: 770.0000 Div Limit: 560.56 acft. PERIOD OF USE: 01/01 TO 12/31
Flow for domestic is part of flow for irrigation. Domestic use at unincorporated areas at
Sunnyside and East Carbon.

SUPPLEMENTAL GROUP NO.: 613983. Water Rights Appurtenant to the following use(s):

91-19(CERT), 28(CERT), 84(CERT), 99(CERT), 114(WUC)
118(CERT), 125(WUC), 141(CERT), 143(CERT), 145(CERT)
146(WUC), 158(CERT), 159(CERT), 178(CERT), 332(UGWC)
360(DEC), 361(DEC), 362(WUC), 363(DEC), 367(WUC)
368(WUC), 369(WUC), 372(DEC)

MINING: DISTRICT: Columbia NAME: Columbia PERIOD OF USE: 01/01 TO 12/31
ORES: coal

Acre Feet Contributed by this Right for this Use: Unevaluated

SUPPLEMENTAL GROUP NO.: 613984. Water Rights Appurtenant to the following use(s):

91-28(CERT), 84(CERT), 114(WUC), 118(CERT), 125(WUC)
141(CERT), 143(CERT), 145(CERT), 158(CERT), 159(CERT)
360(DEC), 361(DEC), 362(WUC), 363(DEC), 367(WUC)
368(WUC), 369(WUC), 372(DEC)

MINING: DISTRICT: Sunnyside NAME: Sunnyside PERIOD OF USE: 01/01 TO 12/31
ORES: coal

Acre Feet Contributed by this Right for this Use: Unevaluated

SUPPLEMENTAL GROUP NO.: 613985. Water Rights Appurtenant to the following use(s):

91-28(CERT), 84(CERT), 114(WUC), 118(CERT), 125(WUC)
141(CERT), 143(CERT), 145(CERT), 146(WUC), 148(CERT)
149(CERT), 150(CERT), 158(CERT), 159(CERT), 178(CERT)
183(CERT), 360(DEC), 361(DEC), 362(WUC), 363(DEC)
367(WUC), 368(WUC), 369(WUC), 372(DEC)

MINING: DISTRICT: Columbia NAME: Horse Canyon PERIOD OF USE: 01/01 TO 12/31
ORES: Coal

Acre Feet Contributed by this Right for this Use: Unevaluated

Administratively changed on Feb 14, 2007, by deleting the Domestic entry for 800 persons, and
adding it to this Mining entry. The Mining was to employ and/or service the 800 persons.

INDUSTRIAL: In conjunction with the coal mining occurring at Horse Canyon. PERIOD OF USE: 01/01 TO 12/31
Acre Feet Contributed by this Right for this Use: Unevaluated

SUPPLEMENTAL GROUP NO.: 614007. Water Rights Appurtenant to the following use(s):

91-28(CERT), 84(CERT), 114(WUC), 118(CERT), 125(WUC)
141(CERT), 146(WUC), 158(CERT), 360(DEC), 361(DEC)
362(WUC), 363(DEC), 367(WUC), 368(WUC), 369(WUC)
372(DEC)

IRRIGATION: Sole Supply: UNEVALUATED acres Group Total: 11.28 Div Limit: 45.12 acft. PERIOD OF USE: 04/01 TO 10/15

NORTH WEST QUARTER				NORTH EAST QUARTER				SOUTH WEST QUARTER				SOUTH EAST			
NW	NE	SW	SE	NW	NE	SW	SE	NW	NE	SW	SE	NW	NE		
Sec 06 T 15S R 14E S1E1								11.28000							
GROUP															

SUPPLEMENTAL GROUP NO.: 614158. Water Rights Appurtenant to the following use(s):

91-28(CERT), 84(CERT), 114(WUC), 118(CERT), 125(WUC)
141(CERT), 143(CERT), 144(CERT), 145(CERT), 146(WUC)
158(CERT), 178(CERT), 239(APP), 360(DEC), 361(DEC)
362(WUC), 363(DEC), 367(WUC), 368(WUC), 369(WUC)
372(DEC)

MUNICIPAL: Sunnyside PERIOD OF USE: 01/01 TO 12/31
Acre Feet Contributed by this Right for this Use: Unevaluated

This Right (91-141) has an evaluated sole-supply total for irrigation of 0.0000 acres.

This Right (91-141) is a member of 14 supplemental water right groups with irrigated acreage totaling 1361.3300 acres.

Storage from 06/15 to 12/15, inclusive, in Grassy Trail Reservoir with a maximum capacity of 916.000 acre-feet, located in:

utah 80V Online Services Agency List Business

Utah Division of Water Rights

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(WARNING: Water Rights makes NO claims as to the accuracy of this data.) RUN DATE: 01/26/2011

WATER RIGHT: 91-142 APPLICATION/CLAIM NO.: A15619 CERT. NO.: 5614
CHANGES: a2598 Certificate 5614 (Issued:)

OWNERSHIP*****

NAME: East Carbon City
ADDR: P.O. Box 70
East Carbon UT 84520
INTEREST: 100% REMARKS:

DATES, ETC.*****

LAND OWNED BY APPLICANT? COUNTY TAX ID#:
FILED: 12/18/1943 PRIORITY: 12/18/1943 PUB BEGAN: [PUB ENDED: [NEWSPAPER:
ProtestEnd: [PROTESTED: [No] [HEARNG HLD: [SE ACTION: [Approved] [ActionDate: 12/20/1944] [PROOF DUE:
EXTENSION: [ELEC/PROOF: [] [ELEC/PROOF: [CERT/WUC: 03/25/1971] [LAP, ETC: [LAPS LETTER:
RUSH LETTR: [RENOVATE: [] [RECON REQ: [TYPE: []
PD BOOK: [91-5] [MAP: [58c] [PUB DATE:
*TYPE -- DOCUMENT -- STATUS--

Type of Right: Application to Appropriate Source of Info: Proposed Determination Status: Certificate

LOCATION OF WATER RIGHT*** (Points of Diversion: Click on Location to access PLAT Program.) *****MAP VIEWER*****

FLOW: 50.0 acre-feet SOURCE: Grassy Trail Creek
COUNTY: Carbon COMMON DESCRIPTION:

POINT OF DIVERSION -- SURFACE:
(1) S 2824 ft W 1166 ft from NE cor, Sec 12, T 14S, R 13E, SLBM
Diverting Works:

Source:

Stream Alt Required?: No

POINTS OF REDIVERSION:
(1) S 1163 ft W 645 ft from NE cor, Sec 18, T 14S, R 14E, SLBM
Diverting Works:
(2) N 1521 ft W 1983 ft from SE cor, Sec 29, T 14S, R 14E, SLBM
Diverting Works:
(3) S 1013 ft E 125 ft from W4 cor, Sec 01, T 15S, R 13E, SLBM
Diverting Works:
(4) N 91 ft E 2391 ft from W4 cor, Sec 06, T 15S, R 14E, SLBM
Diverting Works:

Source:

Source:

Source:

Source:

USES OF WATER RIGHT***** ELU -- Equivalent Livestock Unit (cow, horse, etc.) ***** EDU -- Equivalent Domestic Unit or 1 Family

SUPPLEMENTAL GROUP NO.: 613979. Water Rights Appurtenant to the following use(s):
91-28(CERT), 84(CERT), 114(WUC), 118(CERT), 125(WUC)
140(CERT), 141(CERT), 142(CERT), 143(CERT), 145(CERT)
146(WUC), 158(CERT), 159(CERT), 178(CERT), 360(DEC)
361(DEC), 362(WUC), 363(DEC), 367(WUC), 368(WUC)
369(WUC), 372(DEC)

IRRIGATION: Sole Supply: UNEVALUATED acres Group Total: 149.02 Div Limit: 582.56 acft. PERIOD OF USE: 04/01 TO 10/31

##PLACE OF USE:	NORTH WEST QUARTER				NORTH EAST QUARTER				SOUTH WEST QUARTER				SOUTH EAST			
	NW	NE	SW	SE	NW	NE	SW	SE	NW	NE	SW	SE	NW	NE		
Sec 01 T 15S R 13E SLBM *																
Sec 02 T 15S R 13E SLBM *																

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Utah Division of Water Rights

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(WARNING: Water Rights makes NO claims as to the accuracy of this data.) RUN DATE: 01/26/2011

WATER RIGHT: 91-143 APPLICATION/CLAIM NO.: A15620 CERT. NO.: 5510
CHANGES: a2594 Certificate 5510 (Issued:)

OWNERSHIP*****

NAME: Sunnyside Cogeneration Associates (Public Water Supplier)
ADDR: Attn: Plant Manager
P.O. Box 159
Sunnyside UT 84539

INTEREST: 100% REMARKS:

DATES, ETC.*****

LAND OWNED BY APPLICANT? COUNTY TAX ID#:
FILED: 12/18/1943 PRIORITY: 12/18/1943 PUB BEGAN: | PUB ENDED: | NEWSPAPER:
ProtestEnd: | PROTESTED: [No] | HEARING HLD: | SE ACTION: [Approved] | ActionDate: 02/14/1945 | PROOF DUE:
EXTENSION: | ELEC/PROOF: [] | ELEC/PROOF: | CERT/WUC: 03/26/1971 | LAP, ETC: | LAPS LETTER:
RUSH LETTR: | RENOVATE: | RECON REQ: | TYPE: []
PD BOOK: [91-5] | MAP: [58c] | PUB DATE:

*TYPE -- DOCUMENT -- STATUS

Type of Right: Application to Appropriate Source of Info: Proposed Determination Status: Certificate

LOCATION OF WATER RIGHT** (Points of Diversion: Click on Location to access PLAT Program.) *****MAP VIEWER*****

FLOW: 16.67 acre-feet SOURCE: Grassy Trail Creek
COUNTY: Carbon COMMON DESCRIPTION:

POINTS OF DIVERSION -- SURFACE:

(1) S 2824 ft W 1166 ft from N4 cor, Sec 07, T 14S, R 14E, SLBM

Diverting Works:

Source:

(2) S 1163 ft W 644 ft from NE cor, Sec 18, T 14S, R 14E, SLBM

Diverting Works:

Source:

(3) N 1521 ft W 1983 ft from SE cor, Sec 29, T 14S, R 14E, SLBM

Diverting Works:

Source:

(4) S 1013 ft E 125 ft from W4 cor, Sec 01, T 15S, R 13E, SLBM

Diverting Works:

Source:

(5) N 1604 ft E 1245 ft from SW cor, Sec 02, T 15S, R 13E, SLBM

Diverting Works:

Source:

(6) N 750 ft W 1345 ft from SE cor, Sec 03, T 15S, R 13E, SLBM

Diverting Works:

Source:

(7) S 566 ft E 4323 ft from NW cor, Sec 09, T 15S, R 13E, SLBM

Diverting Works:

Source:

(8) S 1149 ft E 1320 ft from NW cor, Sec 09, T 15S, R 13E, SLBM

Diverting Works:

Source:

(9) N 91 ft E 2390 ft from W4 cor, Sec 06, T 15S, R 14E, SLBM

Diverting Works:

Source:

Stream Alt Required?: No

USES OF WATER RIGHT***** ELU -- Equivalent Livestock Unit (cow, horse, etc.) ***** EDU -- Equivalent Domestic Unit or 1 Family

SUPPLEMENTAL GROUP NO.: 613977. Water Rights Appurtenant to the following use(s):

91-28(CERT), 84(CERT), 114(WUC), 118(CERT), 125(WUC),
141(CERT), 143(CERT), 145(CERT), 146(WUC), 158(CERT),
159(CERT), 178(CERT), 360(DEC), 361(DEC), 362(WUC),
363(DEC), 367(WUC), 368(WUC), 369(WUC), 372(DEC)

IRRIGATION: Sole Supply: UNEVALUATED acres Group Total: 15.63 Div Limit: 62.52 acft. PERIOD OF USE: 04/01 TO 10/31

###PLACE OF USE:	NORTH WEST QUARTER				NORTH EAST QUARTER				SOUTH WEST QUARTER				SOUTH EAST QUARTER			
	NW	NE	SW	SE	NW	NE	SW	SE	NW	NE	SW	SE	NW	NE	SW	
Sec 17 T 15S R 14E SLBM	*				*				*				*			
Sec 18 T 15S R 14E SLBM	*				*				*	3.8000		5.8200	*			
											5.2100			0.8000*		

GROUP ACR

SUPPLEMENTAL GROUP NO.: 613979. Water Rights Appurtenant to the following use(s):

91-28(CERT), 84(CERT), 114(WUC), 118(CERT), 125(WUC),
140(CERT), 141(CERT), 142(CERT), 143(CERT), 145(CERT),
146(WUC), 158(CERT), 159(CERT), 178(CERT), 360(DEC),
361(DEC), 362(WUC), 363(DEC), 367(WUC), 368(WUC),
369(WUC), 372(DEC)

IRRIGATION: Sole Supply: UNEVALUATED acres Group Total: 149.02 Div Limit: 582.56 acft. PERIOD OF USE: 04/01 TO 10/31

###PLACE OF USE:	NORTH WEST QUARTER				NORTH EAST QUARTER				SOUTH WEST QUARTER				SOUTH EAST QUARTER			
	NW	NE	SW	SE	NW	NE	SW	SE	NW	NE	SW	SE	NW	NE	SW	
Sec 01 T 15S R 13E SLBM	*				*				*				*			
Sec 02 T 15S R 13E SLBM	*				*				*	19.4100	26.3100	6.5600	15.9300	20.8800	8.6200	8.71
																126.00

GROUP ACR

SUPPLEMENTAL GROUP NO.: 613980. Water Rights Appurtenant to the following use(s):

91-19(CERT), 28(CERT), 84(CERT), 114(WUC), 118(CERT),
120(CERT), 124(CERT), 125(WUC), 141(CERT), 143(CERT),
145(CERT), 146(WUC), 158(CERT), 159(CERT), 178(CERT)

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Utah Division of Water Rights

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(WARNING: Water Rights makes NO claims as to the accuracy of this data.) RUN DATE: 01/26/2011

WATER RIGHT: **91-144** APPLICATION/CLAIM NO.: **A15620a** CERT. NO.: 7959
CHANGES: a3048 Certificate 7959 (Issued:)

OWNERSHIP*****

NAME: East Carbon City (Public Water Supplier)
ADDR: 200 East Park Place
East Carbon UT 84520
INTEREST: 50% REMARKS:

NAME: Sunnyside City (Public Water Supplier)
ADDR: P.O. Box 69
Sunnyside UT 84539
INTEREST: 50% REMARKS:

DATES, ETC.*****

LAND OWNED BY APPLICANT? COUNTY TAX ID#:
FILED: 12/18/1943|PRIORITY: 12/18/1943|PUB BEGAN: |PUB ENDED: |NEWSPAPER:
ProtestEnd: |PROTESTED: [No] |HEARNG HLD: |SE ACTION: [Approved] |ActionDate: 09/02/1948|PROOF DUE:
EXTENSION: |ELEC/PROOF: { } |ELEC/PROOF: |CERT/WUC: 10/28/1970|LAP, ETC: |LAPS LETTER:
RUSH LETTR: |RENOVATE: |RECON REQ: |TYPE: []
PD BOOK: [91-5] |MAP: [58c] |PUB DATE:
*TYPE -- DOCUMENT -- STATUS

Type of Right: Application to Appropriate Source of Info: Proposed Determination Status: Certificate

LOCATION OF WATER RIGHT***(Points of Diversion: Click on Location to access PLAT Program.)*****[MAP VIEWER](#)*****

FLOW: 33.33 acre-feet SOURCE: Grassy Trail Creek
COUNTY: Carbon COMMON DESCRIPTION:

POINTS OF DIVERSION -- SURFACE:

- (1) S 2824 ft W 1166 ft from NE cor, Sec 12, T 14S, R 13E, SLBM
Diverting Works:
(2) S 1163 ft W 645 ft from NE cor, Sec 18, T 14S, R 14E, SLBM
Diverting Works:

Source:
Source:

Stream Alt Required?: No

USES OF WATER RIGHT***** ELU -- Equivalent Livestock Unit (cow, horse, etc.) ***** EDU -- Equivalent Domestic Unit or 1 Family

SUPPLEMENTAL GROUP NO.: **614158** Water Rights Appurtenant to the following use(s):

91-28(CERT), 84(CERT), 114(WUC), 118(CERT), 125(WUC)
141(CERT), 143(CERT), 144(CERT), 145(CERT), 146(WUC)
158(CERT), 178(CERT), 239(APPL), 360(DEC), 361(DEC)
362(WUC), 363(DEC), 367(WUC), 368(WUC), 369(WUC)
372(DEC)

MUNICIPAL: Sunnyside

Acre Feet Contributed by this Right for this Use: Unevaluated

PERIOD OF USE: 01/01 TO 12/31

Storage from 01/01 to 12/31, inclusive, in Grassy Trail Reservoir with a maximum capacity of 916.000 acre-feet, located in:

Height of Dam:	89	NORTH-WEST th	NORTH-EAST th	SOUTH-WEST th	SOUTH-EAST th
Area Inundated:		NW NE SW SE	NW NE SW SE	NW NE SW SE	NW NE SW SE
Sec 07 T 14S R 14E SLBM		* X: X: X: X*	* : : : *	* X: X: : *	* : : : *

Small Dam Required?: No

OTHER COMMENTS*****

Point of diversion as given: S 2823' & W 3055' from N 1/4 corner, Section 7,
T14S, R14E, SLBM.

*****E N D O F D A T A*****

Utah Division of Water Rights

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Select Related Information

(WARNING: Water Rights makes NO claims as to the accuracy of this data.) RUN DATE: 01/26/2011

 WATER RIGHT: **91-145** APPLICATION/CLAIM NO.: **A15621** CERT. NO.: 5684
 CHANGES: a2595 Certificate 5684 (Issued:)

OWNERSHIP*****

 NAME: Sunnyside Cogeneration Associates (Public Water Supplier)
 ADDR: Attn: Plant Manager
 P.O. Box 159
 Sunnyside UT 84539

INTEREST: 100% REMARKS:

DATES, ETC.*****

 LAND OWNED BY APPLICANT? COUNTY TAX ID#:
 FILED: 12/18/1943 PRIORITY: 12/18/1943 PUB BEGAN: [PUB ENDED: [NEWSPAPER:
 ProtestEnd: [PROTESTED: [No]] HEARING HLD: [SE ACTION: [Approved]] ActionDate: 01/02/1945 PROOF DUE:
 EXTENSION: [ELEC/PROOF: []] ELEC/PROOF: [CERT/WUC: 03/26/1971 LAP, ETC: [LAPS LETTER:
 RUSH LETTR: [RENOVATE: [RECON REQ: [TYPE: []]
 PD BOOK: [91-5]] MAP: [58c]] PUB DATE: []
 *TYPE -- DOCUMENT -- STATUS--

Type of Right: Application to Appropriate Source of Info: Proposed Determination Status: Certificate

LOCATION OF WATER RIGHT***(Points of Diversion: Click on Location to access PLAT Program.)*****MAP VIEWER*****

 FLOW: 16.67 acre-feet SOURCE: Grassy Trail Creek
 COUNTY: Carbon COMMON DESCRIPTION:

POINTS OF DIVERSION -- SURFACE:

(1) S 2824 ft W 1166 ft from N4 cor, Sec 07, T 14S, R 14E, SLBM

Diverting Works:

Source:

(2) S 1163 ft W 644 ft from NE cor, Sec 18, T 14S, R 14E, SLBM

Diverting Works:

Source:

(3) N 1521 ft W 1983 ft from SE cor, Sec 29, T 14S, R 14E, SLBM

Diverting Works:

Source:

(4) S10137 ft E 125 ft from W4 cor, Sec 01, T 15S, R 13E, SLBM

Diverting Works:

Source:

(5) N 1604 ft E 1245 ft from SW cor, Sec 02, T 15S, R 13E, SLBM

Diverting Works:

Source:

(6) N 750 ft W 1345 ft from SE cor, Sec 03, T 15S, R 13E, SLBM

Diverting Works:

Source:

(7) S 566 ft E 4323 ft from NW cor, Sec 09, T 15S, R 13E, SLBM

Diverting Works:

Source:

(8) S 1149 ft E 1320 ft from NW cor, Sec 09, T 15S, R 13E, SLBM

Diverting Works:

Source:

(9) N 91 ft E 2390 ft from W4 cor, Sec 06, T 15S, R 14E, SLBM

Diverting Works:

Source:

Stream Alt Required?: No

USES OF WATER RIGHT***** ELU -- Equivalent Livestock Unit (cow, horse, etc.) ***** EDU -- Equivalent Domestic Unit or 1 Family

SUPPLEMENTAL GROUP NO.: 613977. Water Rights Appurtenant to the following use(s):

91-28(CERT), 84(CERT), 114(WUC), 118(CERT), 125(WUC)

141(CERT), 143(CERT), 145(CERT), 146(WUC), 158(CERT)

159(CERT), 178(CERT), 360(DEC), 361(DEC), 362(WUC)

363(DEC), 367(WUC), 368(WUC), 369(WUC), 372(DEC)

IRRIGATION: Sole Supply: UNEVALUATED acres Group Total: 15.63 Div Limit: 62.52 acft. PERIOD OF USE: 04/01 TO 10/31

 ***PLACE OF USE: *-----NORTH WEST QUARTER-----*-----NORTH EAST QUARTER-----*-----SOUTH WEST QUARTER-----*-----SOUTH EAST
 * NW NE SW SE * NW NE SW SE * NW NE SW SE * NW NE
 Sec 17 T 15S R 14E SLBM * 3.8000 5.2100 5.8200 0.8000
 Sec 18 T 15S R 14E SLBM *
 ***** GROUP

SUPPLEMENTAL GROUP NO.: 613979. Water Rights Appurtenant to the following use(s):

91-28(CERT), 84(CERT), 114(WUC), 118(CERT), 125(WUC)

140(CERT), 141(CERT), 142(CERT), 143(CERT), 145(CERT)

146(WUC), 158(CERT), 159(CERT), 178(CERT), 360(DEC)

361(DEC), 362(WUC), 363(DEC), 367(WUC), 368(WUC)

369(WUC), 372(DEC)

IRRIGATION: Sole Supply: UNEVALUATED acres Group Total: 149.02 Div Limit: 582.56 acft. PERIOD OF USE: 04/01 TO 10/31

 ***PLACE OF USE: *-----NORTH WEST QUARTER-----*-----NORTH EAST QUARTER-----*-----SOUTH WEST QUARTER-----*-----SOUTH EAST
 * NW NE SW SE * NW NE SW SE * NW NE SW SE * NW NE
 Sec 01 T 15S R 13E SLBM * 19.4100 26.3100 6.5600 15.9300 20.8800 8.6200
 Sec 02 T 15S R 13E SLBM *
 ***** GROUP

SUPPLEMENTAL GROUP NO.: 613980. Water Rights Appurtenant to the following use(s):

91-19(CERT), 28(CERT), 84(CERT), 114(WUC), 118(CERT)

120(CERT), 124(CERT), 125(WUC), 141(CERT), 143(CERT)

145 (CERT), 146 (WUC), 158 (CERT), 159 (CERT), 178 (CERT)
 360 (DEC), 361 (DEC), 362 (WUC), 363 (DEC), 367 (WUC)
 368 (WUC), 369 (WUC), 372 (DEC)

DOMESTIC: Sole Supply: UNEVALUATED EDUs Group Total: 105.0000 Div Limit: 76.44 acft. PERIOD OF USE: 01/01 TO 12/31
 Domestic uses in Columbia, Utah.

SUPPLEMENTAL GROUP NO.: **613981**. Water Rights Appurtenant to the following use(s):

91-28 (CERT), 84 (CERT), 114 (WUC), 118 (CERT), 125 (WUC)
 139 (CERT), 140 (CERT), 141 (CERT), 142 (CERT), 143 (CERT)
 145 (CERT), 146 (WUC), 158 (CERT), 159 (CERT), 178 (CERT)
 360 (DEC), 361 (DEC), 362 (WUC), 363 (DEC), 367 (WUC)
 368 (WUC), 369 (WUC), 372 (DEC)

DOMESTIC: Sole Supply: UNEVALUATED EDUs Group Total: 770.0000 Div Limit: 560.56 acft. PERIOD OF USE: 01/01 TO 12/31
 Flow for domestic is part of flow for irrigation. Domestic use at unincorporated areas at
 Sunnyside and East Carbon.

SUPPLEMENTAL GROUP NO.: **613983**. Water Rights Appurtenant to the following use(s):

91-19 (CERT), 28 (CERT), 84 (CERT), 99 (CERT), 114 (WUC)
 118 (CERT), 125 (WUC), 141 (CERT), 143 (CERT), 145 (CERT)
 146 (WUC), 158 (CERT), 159 (CERT), 178 (CERT), 332 (UGWC)
 360 (DEC), 361 (DEC), 362 (WUC), 363 (DEC), 367 (WUC)
 368 (WUC), 369 (WUC), 372 (DEC)

MINING: DISTRICT: Columbia NAME: Columbia PERIOD OF USE: 01/01 TO 12/31
 ORES: coal

Acre Feet Contributed by this Right for this Use: Unevaluated

SUPPLEMENTAL GROUP NO.: **613984**. Water Rights Appurtenant to the following use(s):

91-28 (CERT), 84 (CERT), 114 (WUC), 118 (CERT), 125 (WUC)
 141 (CERT), 143 (CERT), 145 (CERT), 158 (CERT), 159 (CERT)
 360 (DEC), 361 (DEC), 362 (WUC), 363 (DEC), 367 (WUC)
 368 (WUC), 369 (WUC), 372 (DEC)

MINING: DISTRICT: Sunnyside NAME: Sunnyside PERIOD OF USE: 01/01 TO 12/31
 ORES: coal

Acre Feet Contributed by this Right for this Use: Unevaluated

SUPPLEMENTAL GROUP NO.: **613985**. Water Rights Appurtenant to the following use(s):

91-28 (CERT), 84 (CERT), 114 (WUC), 118 (CERT), 125 (WUC)
 141 (CERT), 143 (CERT), 145 (CERT), 146 (WUC), 148 (CERT)
 149 (CERT), 150 (CERT), 158 (CERT), 159 (CERT), 178 (CERT)
 183 (CERT), 360 (DEC), 361 (DEC), 362 (WUC), 363 (DEC)
 367 (WUC), 368 (WUC), 369 (WUC), 372 (DEC)

MINING: DISTRICT: Columbia NAME: Horse Canyon PERIOD OF USE: 01/01 TO 12/31
 ORES: Coal

Acre Feet Contributed by this Right for this Use: Unevaluated

Administratively changed on Feb 14, 2007, by deleting the Domestic entry for 800 persons, and
 adding it to this Mining entry. The Mining was to employ and/or service the 800 persons.

INDUSTRIAL: In conjunction with the coal mining occurring at Horse Canyon. PERIOD OF USE: 01/01 TO 12/31
 Acre Feet Contributed by this Right for this Use: Unevaluated

SUPPLEMENTAL GROUP NO.: **614158**. Water Rights Appurtenant to the following use(s):

91-28 (CERT), 84 (CERT), 114 (WUC), 118 (CERT), 125 (WUC)
 141 (CERT), 143 (CERT), 144 (CERT), 145 (CERT), 146 (WUC)
 158 (CERT), 178 (CERT), 239 (APP), 360 (DEC), 361 (DEC)
 362 (WUC), 363 (DEC), 367 (WUC), 368 (WUC), 369 (WUC)
 372 (DEC)

MUNICIPAL: Sunnyside PERIOD OF USE: 01/01 TO 12/31
 Acre Feet Contributed by this Right for this Use: Unevaluated

SUPPLEMENTAL GROUP NO.: **615817**. Water Rights Appurtenant to the following use(s):

91-37 (CERT), 99 (CERT), 118 (CERT), 139 (CERT), 143 (CERT)
 145 (CERT), 158 (CERT), 159 (CERT), 361 (DEC), 364 (DEC)
 372 (DEC), 3522 (DIL), 3524 (DIL), 3761 (DIL), 4941 (UNAP)
 4942 (WD)

POWER: SCA Steam Generation Power Plant, rated at 58 MW. PERIOD OF USE: 01/01 TO 12/31
 CFS Contributed by this Right for this Use: Unevaluated

###PLACE OF USE:

	NORTH WEST QUARTER				NORTH EAST QUARTER				SOUTH WEST QUARTER				SOUTH EAST QUARTER				
	NW	NE	SW	SE	NW	NE	SW	SE	NW	NE	SW	SE	NW	NE	SW	SE	
Sec 06 T 15S R 14E SLBM	*				*				*				X				X
													X				X

GROUP

This Right (91-145) has an evaluated sole-supply total for irrigation of 0.0000 acres.

This Right (91-145) is a member of 9 supplemental water right groups with irrigated acreage totaling 164.6500 acres.

Storage from 01/01 to 12/31, inclusive, in Grassy Trail with a maximum capacity of 916.000 acre-feet, located in:

Height of Dam:	89	NORTH-WEST	NORTH-EAST	SOUTH-WEST	SOUTH-EAST
Area Inundated:	NW NE SW SE	NW NE SW SE	NW NE SW SE	NW NE SW SE	NW NE SW SE
Sec 07 T 14S R 14E SLBM	X X: X: X*	* : : *	* X: X: *	* : : *	* : : *

Small Dam Required?: No

OTHER COMMENTS*****

WUCs 91-143,145,159 are limited to the irrigation requirements of 123.4 acres.

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THIS RIGHT IS BEING PROTESTED IN A PROPOSED DETERMINATION BOOK!!!

(WARNING: Water Rights makes NO claims as to the accuracy of this data.) RUN DATE: 01/26/2011

WATER RIGHT: 91-146 APPLICATION/CLAIM NO.: A15621a CERT. NO.: 7958
CHANGES: a3049 Certificate 7958 (Issued:)

OWNERSHIP*****

NAME: East Carbon City (Public Water Supplier)
ADDR: 200 East Park Place
East Carbon UT 84520
INTEREST: 50% REMARKS:NAME: Sunnyside City (Public Water Supplier)
ADDR: P.O. Box 69
Sunnyside UT 84539
INTEREST: 50% REMARKS:

DATES, ETC.*****

LAND OWNED BY APPLICANT? COUNTY TAX ID#:

FILED: 12/18/1943|PRIORITY: 12/18/1943|PUB BEGAN: (PUB ENDED: |NEWSPAPER:
ProtestEnd: |PROTESTED: [No] |HEARNG HLD: |SE ACTION: [Approved]|ActionDate:09/02/1948|PROOF DUE:
EXTENSION: |ELEC/PROOF:[] |ELEC/PROOF: |CERT/WUC: 10/28/1970|LAP, ETC: |LAPS LETTER:
RUSH LETTR: |RENOVATE: |RECON REQ: |TYPE: []
PD BOOK: [91-5] |MAP: [58c] |PUB DATE:

*TYPE -- DOCUMENT -- STATUS--

Type of Right: Application to Appropriate Source of Info: Proposed Determination Status: Water User's Claim

LOCATION OF WATER RIGHT*** (Points of Diversion: Click on Location to access PLAT Program.)*****MAP VIEWER*****

FLOW: 33.33 acre-feet SOURCE: Grassy Trail Creek
COUNTY: Carbon COMMON DESCRIPTION:

POINTS OF DIVERSION -- SURFACE:

(1) S 2824 ft W 1166 ft from N4 cor, Sec 07, T 14S, R 14E, SLBM
Diverting Works:
(2) S 1163 ft W 644 ft from NE cor, Sec 18, T 14S, R 14E, SLBM
Diverting Works:
(3) N 1521 ft W 1983 ft from SE cor, Sec 29, T 14S, R 14E, SLBM
Diverting Works:
(4) S 1013 ft E 125 ft from W4 cor, Sec 01, T 15S, R 13E, SLBM
Diverting Works:
(5) N 750 ft W 1345 ft from SE cor, Sec 02, T 15S, R 13E, SLBM
Diverting Works:
(6) N 1604 ft E 1245 ft from SW cor, Sec 02, T 15S, R 13E, SLBM
Diverting Works:
(7) S 566 ft E 4323 ft from NW cor, Sec 09, T 15S, R 13E, SLBM
Diverting Works:
(8) S 1149 ft E 1320 ft from NW cor, Sec 09, T 15S, R 13E, SLBM
Diverting Works:
(9) N 91 ft E 2390 ft from W4 cor, Sec 06, T 15S, R 14E, SLBM
Diverting Works:

Source:

Source:

Source:

Source:

Source:

Source:

Source:

Source:

Source:

Stream Alt Required?: No

USES OF WATER RIGHT***** ELU -- Equivalent Livestock Unit (cow, horse, etc.) ***** EDU -- Equivalent Domestic Unit or 1 Family

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Utah Division of Water Rights

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(WARNING: Water Rights makes NO claims as to the accuracy of this data.) RUN DATE: 01/26/2011

WATER RIGHT: 91-158 APPLICATION/CLAIM NO.: A19041 CERT. NO.: 7792
 CHANGES: a2942 Certificate 7792 (Issued:)
 a3441 Certificate 7792 (Issued:)
 a4246 Certificate 7792 (Issued:)

OWNERSHIP*****

NAME: Sunnyside Cogeneration Associates (Public Water Supplier)
 ADDR: Attn: Plant Manager
 P.O. Box 159
 Sunnyside UT 84539
 INTEREST: 100% REMARKS:

DATES, ETC.*****

LAND OWNED BY APPLICANT? COUNTY TAX ID#:
 FILED: 08/19/1947 PRIORITY: 08/19/1947 PUB BEGAN: [PUB ENDED: [NEWSPAPER:
 ProtestEnd: [PROTESTED: [No] [HEARING HLD: [SE ACTION: [Approved] ActionDate: 03/30/1949 [PROOF DUE:
 EXTENSION: [ELEC/PROOF: [] [ELEC/PROOF: [CERT/WUC: 03/26/1971 [LAP, ETC: [LAPS LETTER:
 RUSH LETTR: [RENOVATE: [RECON REQ: [TYPE: []
 PD BOOK: [91-5] [MAP: [58c] [PUB DATE:

*TYPE -- DOCUMENT -- STATUS --
 Type of Right: Application to Appropriate Source of Info: Proposed Determination Status: Certificate

LOCATION OF WATER RIGHT***(Points of Diversion: Click on Location to access PLAT Program.)*****MAP VIEWER*****

FLOW: 65.0 acre-feet SOURCE: Grassy Trail Creek
 COUNTY: Carbon COMMON DESCRIPTION:

POINTS OF DIVERSION -- SURFACE:

- (1) S 2824 ft W 1166 ft from N4 cor, Sec 07, T 14S, R 14E, SLBM
Diverting Works: Source:
- (2) S 1163 ft W 644 ft from NE cor, Sec 18, T 14S, R 14E, SLBM
Diverting Works: Source:
- (3) N 1521 ft W 1983 ft from SE cor, Sec 29, T 14S, R 14E, SLBM
Diverting Works: Source:
- (4) S10137 ft E 125 ft from W4 cor, Sec 01, T 15S, R 13E, SLBM
Diverting Works: Source:
- (5) N 1604 ft E 1245 ft from SW cor, Sec 02, T 15S, R 13E, SLBM
Diverting Works: Source:
- (6) N 750 ft W 1345 ft from SE cor, Sec 03, T 15S, R 13E, SLBM
Diverting Works: Source:
- (7) S 566 ft E 4323 ft from NW cor, Sec 09, T 15S, R 13E, SLBM
Diverting Works: Source:
- (8) S 1149 ft E 1320 ft from NW cor, Sec 09, T 15S, R 13E, SLBM
Diverting Works: Source:
- (9) N 91 ft E 2390 ft from W4 cor, Sec 06, T 15S, R 14E, SLBM
Diverting Works: Source:

Stream Alt Required?: No

USES OF WATER RIGHT***** ELU -- Equivalent Livestock Unit (cow, horse, etc.) ***** EDU -- Equivalent Domestic Unit or 1 Family

SUPPLEMENTAL GROUP NO.: 613926. Water Rights Appurtenant to the following use(s):
 91-28(CERT), 84(CERT), 100(WUC), 114(WUC), 118(CERT)
 125(WUC), 141(CERT), 158(CERT), 360(DEC), 361(DEC)
 362(WUC), 363(DEC), 367(WUC), 368(WUC), 369(WUC)
 372(DEC)

IRRIGATION: Sole Supply: UNEVALUATED acres Group Total: 66.5 Div Limit: 266.0 acft. PERIOD OF USE: 06/15 TO 09/15
 Water User's Claim No. 100 is limited to the irrigation requirements of 6.54 acres.

###PLACE OF USE:	NORTH WEST QUARTER				NORTH EAST QUARTER				SOUTH WEST QUARTER				SOUTH EAST			
	NW	NE	SW	SE	NW	NE	SW	SE	NW	NE	SW	SE	NW	NE		
Sec 03 T 15S R 13E SLBM																
Sec 10 T 15S R 13E SLBM			30.0000				36.5000									

SUPPLEMENTAL GROUP NO.: 613974. Water Rights Appurtenant to the following use(s):
 91-28(CERT), 84(CERT), 114(WUC), 118(CERT), 125(WUC)
 141(CERT), 158(CERT), 360(DEC), 361(DEC), 362(WUC)
 363(DEC), 367(WUC), 368(WUC), 369(WUC), 372(DEC)

IRRIGATION: Sole Supply: UNEVALUATED acres Group Total: 932.4 Div Limit: 3729.6 acft. PERIOD OF USE: 04/01 TO 10/31

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(WARNING: Water Rights makes NO claims as to the accuracy of this data.) RUN DATE: 01/26/2011

WATER RIGHT: **91-159** APPLICATION/CLAIM NO.: **A19136** CERT. NO.: 5670
CHANGES: a2683 Certificate 5670 (Issued:)

OWNERSHIP*****

NAME: Sunnyside Cogeneration Associates
ADDR: Attn: Plant Manager
P.O. Box 159
Sunnyside UT 84539

INTEREST: 100% REMARKS:

DATES, ETC.*****

LAND OWNED BY APPLICANT? COUNTY TAX ID#:
FILED: 09/24/1947 PRIORITY: 09/24/1947 PUB BEGAN: (PUB ENDED: (NEWSPAPER:
ProtestEnd: (PROTESTED: [No] (HEARNG HLD: (SE ACTION: [Approved] (ActionDate: 05/24/1950 (PROOF DUE:
EXTENSION: (ELEC/PROOF: (ELEC/PROOF: (CERT/WUC: 03/26/1971 (LAP, ETC: (LAPS LETTER:
RUSH LETTR: (RENOVATE: (RECON REQ: (TYPE: [(]
PD BOOK: [91-5] (MAP: [58c] (PUB DATE:
*TYPE -- DOCUMENT -- STATUS--

Type of Right: Application to Appropriate Source of Info: Proposed Determination Status: Certificate

LOCATION OF WATER RIGHT*** (Points of Diversion: Click on Location to access PLAT Program.) *****MAP VIEWER*****

FLOW: 5.0 cfs SOURCE: Grassy Trail Creek
COUNTY: Carbon COMMON DESCRIPTION:

POINTS OF DIVERSION -- SURFACE:

(1) S 2824 ft W 1166 ft from N4 cor, Sec 07, T 14S, R 14E, SLBM
Diverting Works: Source:
(2) S 1163 ft W 644 ft from NE cor, Sec 18, T 14S, R 14E, SLBM
Diverting Works: Source:
(3) N 1521 ft W 1983 ft from SE cor, Sec 29, T 14S, R 14E, SLBM
Diverting Works: Source:
(4) S 1013 ft E 125 ft from W4 cor, Sec 01, T 15S, R 13E, SLBM
Diverting Works: Source:
(5) N 1604 ft E 1245 ft from SW cor, Sec 02, T 15S, R 13E, SLBM
Diverting Works: Source:
(6) N 750 ft W 1345 ft from SE cor, Sec 03, T 15S, R 13E, SLBM
Diverting Works: Source:
(7) S 566 ft E 4323 ft from NW cor, Sec 09, T 15S, R 13E, SLBM
Diverting Works: Source:
(8) S 1149 ft E 1320 ft from NW cor, Sec 09, T 15S, R 13E, SLBM
Diverting Works: Source:
(9) N 91 ft E 2390 ft from W4 cor, Sec 06, T 15S, R 14E, SLBM
Diverting Works: Source:

Stream Alt Required?: No

USES OF WATER RIGHT***** ELU -- Equivalent Livestock Unit (cow, horse, etc.) ***** EDU -- Equivalent Domestic Unit or 1 Family

SUPPLEMENTAL GROUP NO.: **613977**. Water Rights Appurtenant to the following use(s):

91-28 (CERT), 84 (CERT), 114 (WUC), 118 (CERT), 125 (WUC)
141 (CERT), 143 (CERT), 145 (CERT), 146 (WUC), 158 (CERT)
159 (CERT), 178 (CERT), 360 (DEC), 361 (DEC), 362 (WUC)
363 (DEC), 367 (WUC), 368 (WUC), 369 (WUC), 372 (DEC)

IRRIGATION: Sole Supply: UNEVALUATED acres Group Total: 15.63 Div Limit: 62.52 acft. PERIOD OF USE: 04/01 TO 10/31

###PLACE OF USE:	NORTH WEST QUARTER				NORTH EAST QUARTER				SOUTH WEST QUARTER				SOUTH EAST			
	NW	NE	SW	SE	NW	NE	SW	SE	NW	NE	SW	SE	NW	NE		
Sec 17 T 15S R 14E SLBM	*				*				*	3.8000			*			
Sec 18 T 15S R 14E SLBM	*				*				*	5.2100	5.8200	0.8000	*			

SUPPLEMENTAL GROUP NO.: **613979**. Water Rights Appurtenant to the following use(s):

91-28 (CERT), 84 (CERT), 114 (WUC), 118 (CERT), 125 (WUC)
140 (CERT), 141 (CERT), 142 (CERT), 143 (CERT), 145 (CERT)
146 (WUC), 158 (CERT), 159 (CERT), 178 (CERT), 360 (DEC)
361 (DEC), 362 (WUC), 363 (DEC), 367 (WUC), 368 (WUC)
369 (WUC), 372 (DEC)

IRRIGATION: Sole Supply: UNEVALUATED acres Group Total: 149.02 Div Limit: 582.56 acft. PERIOD OF USE: 04/01 TO 10/31

###PLACE OF USE:	NORTH WEST QUARTER				NORTH EAST QUARTER				SOUTH WEST QUARTER				SOUTH EAST			
	NW	NE	SW	SE	NW	NE	SW	SE	NW	NE	SW	SE	NW	NE		
Sec 01 T 15S R 13E SLBM	*				*				*	19.4100	26.3100	6.5600	15.9300	20.8800		
Sec 02 T 15S R 13E SLBM	*				*				*				*			

SUPPLEMENTAL GROUP NO.: **613980**. Water Rights Appurtenant to the following use(s):

91-19 (CERT), 28 (CERT), 84 (CERT), 114 (WUC), 118 (CERT)
120 (CERT), 124 (CERT), 125 (WUC), 141 (CERT), 143 (CERT)

145(CERT), 146(WUC), 158(CERT), 159(CERT), 178(CERT)
360(DEC), 361(DEC), 362(WUC), 363(DEC), 367(WUC)
368(WUC), 369(WUC), 372(DEC)

DOMESTIC: Sole Supply: UNEVALUATED EDUs Group Total: 105.0000 Div Limit: 76.44 acft. PERIOD OF USE: 01/01 TO 12/31
 Domestic uses in Columbia, Utah.

SUPPLEMENTAL GROUP NO.: 613981. Water Rights Appurtenant to the following use(s):
91-28(CERT), 84(CERT), 114(WUC), 118(CERT), 125(WUC)
139(CERT), 140(CERT), 141(CERT), 142(CERT), 143(CERT)
145(CERT), 146(WUC), 158(CERT), 159(CERT), 178(CERT)
360(DEC), 361(DEC), 362(WUC), 363(DEC), 367(WUC)
368(WUC), 369(WUC), 372(DEC)

DOMESTIC: Sole Supply: UNEVALUATED EDUs Group Total: 770.0000 Div Limit: 560.56 acft. PERIOD OF USE: 01/01 TO 12/31
 Flow for domestic is part of flow for irrigation. Domestic use at unincorporated areas at
 Sunnyside and East Carbon.

SUPPLEMENTAL GROUP NO.: 613983. Water Rights Appurtenant to the following use(s):
91-19(CERT), 28(CERT), 84(CERT), 99(CERT), 114(WUC)
118(CERT), 125(WUC), 141(CERT), 143(CERT), 145(CERT)
146(WUC), 158(CERT), 159(CERT), 178(CERT), 332(UGWC)
360(DEC), 361(DEC), 362(WUC), 363(DEC), 367(WUC)
368(WUC), 369(WUC), 372(DEC)

MINING: DISTRICT: Columbia NAME: Columbia PERIOD OF USE: 01/01 TO 12/31
 ORES: coal
 Acre Feet Contributed by this Right for this Use: Unevaluated

SUPPLEMENTAL GROUP NO.: 613984. Water Rights Appurtenant to the following use(s):
91-28(CERT), 84(CERT), 114(WUC), 118(CERT), 125(WUC)
141(CERT), 143(CERT), 145(CERT), 158(CERT), 159(CERT)
360(DEC), 361(DEC), 362(WUC), 363(DEC), 367(WUC)
368(WUC), 369(WUC), 372(DEC)

MINING: DISTRICT: Sunnyside NAME: Sunnyside PERIOD OF USE: 01/01 TO 12/31
 ORES: coal
 Acre Feet Contributed by this Right for this Use: Unevaluated

SUPPLEMENTAL GROUP NO.: 613985. Water Rights Appurtenant to the following use(s):
91-28(CERT), 84(CERT), 114(WUC), 118(CERT), 125(WUC)
141(CERT), 143(CERT), 145(CERT), 146(WUC), 148(CERT)
149(CERT), 150(CERT), 158(CERT), 159(CERT), 178(CERT)
183(CERT), 360(DEC), 361(DEC), 362(WUC), 363(DEC)
367(WUC), 368(WUC), 369(WUC), 372(DEC)

MINING: DISTRICT: Columbia NAME: Horse Canyon PERIOD OF USE: 01/01 TO 12/31
 ORES: Coal
 Acre Feet Contributed by this Right for this Use: Unevaluated
 Administratively changed on Feb 14, 2007, by deleting the Domestic entry for 800 persons, and
 adding it to this Mining entry. The Mining was to employ and/or service the 800 persons.

INDUSTRIAL: In conjunction with the coal mining occurring at Horse Canyon. PERIOD OF USE: 01/01 TO 12/31
 Acre Feet Contributed by this Right for this Use: Unevaluated

SUPPLEMENTAL GROUP NO.: 615817. Water Rights Appurtenant to the following use(s):
91-37(CERT), 99(CERT), 118(CERT), 139(CERT), 143(CERT)
145(CERT), 158(CERT), 159(CERT), 361(DEC), 364(DEC)
372(DEC), 3522(DIL), 3524(DIL), 3761(DIL), 4941(UNAP)
4942(WD)

POWER: SCA Steam Generation Power Plant, rated at 58 MW. PERIOD OF USE: 01/01 TO 12/31
 CFS Contributed by this Right for this Use: Unevaluated

NORTH WEST QUARTER				NORTH EAST QUARTER				SOUTH WEST QUARTER				SOUTH EAST				
NW	NE	SW	SE	NW	NE	SW	SE	NW	NE	SW	SE	NW	NE	SW	SE	
Sec 06 T 15S R 14E SLBM																

This Right (91-159) has an evaluated sole-supply total for irrigation of 0.0000 acres.

This Right (91-159) is a member of 8 supplemental water right groups with irrigated acreage totaling 164.6500 acres.

Storage from 01/01 to 12/31, inclusive, in Grassy Trail Reservoir with a maximum capacity of 916.000 acre-feet, located in:

Height of Dam:	89	NORTH-WEST¼	NORTH-EAST¼	SOUTH-WEST¼	SOUTH-EAST¼
Area Inundated:		NW NE SW SE	NW NE SW SE	NW NE SW SE	NW NE SW SE
Sec 07 T 14S R 14E SLBM		* X: X: X: X*	* : : : *	* X: X: : *	* : : : *

Small Dam Required?: No

OTHER COMMENTS*****

For irrigation, WUCs 91-143, 145, 159 are limited to the requirements of
 123.40 acres.

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(WARNING: Water Rights makes NO claims as to the accuracy of this data.) RUN DATE: 01/26/2011

WATER RIGHT: 91-178 APPLICATION/CLAIM NO.: A20409 CERT. NO.: 5901
CHANGES: a3770 Certificate 5901 (Issued:)

OWNERSHIP*****

NAME: East Carbon City (Public Water Supplier)
ADDR: 200 East Park Place
East Carbon UT 84520
INTEREST: 50% REMARKS:

NAME: Sunnyside City (Public Water Supplier)
ADDR: P.O. Box 69
Sunnyside UT 84539
INTEREST: 50% REMARKS:

DATES, ETC.*****

LAND OWNED BY APPLICANT? COUNTY TAX ID#:
FILED: 12/21/1948 PRIORITY: 12/19/1951 PUB BEGAN: |PUB ENDED: |NEWSPAPER:
ProtestEnd: |PROTESTED: [No] |HEARNG HLD: |SE ACTION: [Approved] |ActionDate: 02/09/1953 |PROOF DUE:
EXTENSION: |ELEC/PROOF: [] |ELEC/PROOF: |CERT/WUC: 10/28/1970 |LAP, ETC: |LAPS LETTER:
RUSH LETTR: |RENOVATE: |RECON REQ: |TYPE: []
PD BOOK: [91-5] |MAP: [58c] |PUB DATE:
*TYPE -- DOCUMENT -- STATUS-----

Type of Right: Application to Appropriate Source of Info: Proposed Determination Status: Certificate

LOCATION OF WATER RIGHT***(Points of Diversion: Click on Location to access PLAT Program.)*****MAP VIEWER*****

FLOW: 916.0 acre-feet SOURCE: Grassy Trail Creek
COUNTY: Carbon COMMON DESCRIPTION:

POINTS OF DIVERSION -- SURFACE:

(1) S 2824 ft W 1166 ft from N4 cor, Sec 07, T 14S, R 14E, SLBM
Diverting Works:
(2) S 1163 ft W 644 ft from NE cor, Sec 18, T 14S, R 14E, SLBM
Diverting Works:
(3) N 1521 ft W 1983 ft from SE cor, Sec 29, T 14S, R 14E, SLBM
Diverting Works:
(4) S 1013 ft E 125 ft from W4 cor, Sec 01, T 15S, R 13E, SLBM
Diverting Works:
(5) N 1604 ft E 1245 ft from SW cor, Sec 02, T 15S, R 13E, SLBM
Diverting Works:
(6) N 750 ft W 1345 ft from SE cor, Sec 03, T 15S, R 13E, SLBM
Diverting Works:
(7) S 566 ft E 4323 ft from NW cor, Sec 09, T 15S, R 13E, SLBM
Diverting Works:
(8) S 1149 ft E 1320 ft from NW cor, Sec 09, T 15S, R 13E, SLBM
Diverting Works:
(9) N 91 ft E 2390 ft from W4 cor, Sec 06, T 15S, R 14E, SLBM
Diverting Works:

Source:

Source:

Source:

Source:

Source:

Source:

Source:

Source:

Source:

Stream Alt Required?: No

USES OF WATER RIGHT***** ELU -- Equivalent Livestock Unit (cow, horse, etc.) ***** EDU -- Equivalent Domestic Unit or 1 Family

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(WARNING: Water Rights makes NO claims as to the accuracy of this data.) RUN DATE: 01/26/2011

WATER RIGHT: 91-300 APPLICATION/CLAIM NO.: D376 CERT. NO.:

OWNERSHIP*****

NAME: Jay Pagano

ADDR: Wellington UT 84542

REMARKS: 55 elu's (supplemental)

DATES, ETC.*****

LAND OWNED BY APPLICANT? COUNTY TAX ID#:
 FILED: 02/29/1956 PRIORITY: / 1869 PUB BEGAN: PUB ENDED: NEWSPAPER:
 ProtestEnd: PROTESTED: [No] HEARING HLD: SE ACTION: [] ActionDate: PROOF DUE:
 EXTENSION: ELEC/PROOF: [] ELEC/PROOF: CERT/WUC: 09/03/1968 LAP, ETC: LAPS LETTER:
 RUSH LETTR: RENOVATE: RECON REQ: TYPE: []
 PD BOOK: [91-5] MAP: [57] PUB DATE:

*TYPE -- DOCUMENT -- STATUS
 Type of Right: Diligence Claim Source of Info: Proposed Determination Status:

LOCATION OF WATER RIGHT***(Points of Diversion: Click on Location to access PLAT Program.)*****MAP VIEWER*****

FLOW: SOURCE: Left Fork of Whitmore Canyon
 COUNTY: Carbon COMMON DESCRIPTION:

POINT OF DIVERSION -- POINT TO POINT:

(1) Stockwatering directly on stream from a point at N 660 ft. E 660 ft. from S4 corner, Sec 35, T13S, R13E, SLBM,
 to a point at N 660 ft. E 660 ft. from S4 corner, Sec 35, T13S, R13E, SLBM.
 COMMENT: Administratively updated by State Engineer.

USES OF WATER RIGHT***** ELU -- Equivalent Livestock Unit (cow, horse, etc.) ***** EDU -- Equivalent Domestic Unit or 1 Family

SUPPLEMENTAL GROUP NO.: 623387. Water Rights Appurtenant to the following use(s):

91-300(DIL), 302(DIL), 836(DIL), 2021(DIL), 2022(DIL)
 2023(DIL), 2024(DIL), 2025(DIL), 2026(DIL), 2027(DIL)
 2028(DIL), 2029(DIL), 2030(DIL), 2031(DIL), 2032(DIL)
 2033(DIL), 2034(DIL), 2035(DIL), 2036(DIL), 2037(DIL)
 2038(DIL), 2039(DIL), 2040(DIL), 2041(DIL)

STOCKWATER: Sole Supply: UNEVALUATED ELUs Group Total: 55.0000 Div Limit: PERIOD OF USE: 01/01 TO 12/31

PLACE OF USE for STOCKWATERING*****

Sec 35 T 13S R 13E SLBM
 NORTH-WEST* NORTH-EAST* SOUTH-WEST* SOUTH-EAST*
 NW NE SW SE NW NE SW SE NW NE SW SE NW NE SW SE
 * : : : * * : : : * * : : : * * : : X: *

SEGREGATION HISTORY*****

This Right as originally filed:

FLOW IN CFS	QUANTITY IN ACRE-FEET	IRRIGATED ACREAGE	STOCK (ELUs)	DOMESTIC (FAMILIES)	MUNICIPAL	MINING	POWER	OTHER
	13.44		480.0000					

The following Water Rights have been Segregated from 91-300:

(1) WRNUM: 91-5112 11.88 425.0000
 APPL#: D376
 NAME: Hinkins, David P., Ross D., Todd S.
 FILED: 11/27/2006 STATUS: APP
 APPR:

CFS	ACRE-FEET	IRRIGATED ACREAGE	STOCK (ELUs)	DOMESTIC (FAMILIES)	MUNICIPAL	MINING	POWER	OTHER
91-300 currently has: -	1.56		55.0000					

All ACRE-FEET has been SEGREGATED OFF.

*****E N D O F D A T A*****



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(WARNING: Water Rights makes NO claims as to the accuracy of this data.) RUN DATE: 01/26/2011

WATER RIGHT: 91-302

APPLICATION/CLAIM NO.: D378

CERT. NO.:

OWNERSHIP*****

NAME: Jay Pagano

ADDR: Wellington UT 84542

REMARKS: 55 elu's (supplemental)

DATES, ETC.*****

LAND OWNED BY APPLICANT?

COUNTY TAX ID#:

FILED: 02/29/1956|PRIORITY: / /1898|PUB BEGAN:

|PUB ENDED:

|NEWSPAPER:

ProtestEnd: |PROTESTED: [No]|HEARNG HLD:

|SE ACTION: []|ActionDate:

|PROOF DUE:

EXTENSION: |ELEC/PROOF:[]|ELEC/PROOF:

|CERT/WUC: 09/03/1968|LAP, ETC:

|LAPS LETTER:

RUSH LETTR:

|RENOVATE:

|RECON REQ:

|TYPE: []

PD BOOK: [91-5]|MAP: [58]|PUB DATE:

*TYPE -- DOCUMENT -- STATUS--

Type of Right: Diligence Claim

Source of Info: Proposed Determination

Status:

LOCATION OF WATER RIGHT*** (Points of Diversion: Click on Location to access PLAT Program.)*****[MAP VIEWER](#)*****

FLOW:

COUNTY: Carbon

COMMON DESCRIPTION:

SOURCE: Left Fork of Whitmore Canyon

POINT OF DIVERSION -- POINT TO POINT:

(1) Stockwatering directly on stream from a point at S 660 ft. W 660 ft. from E4 corner, Sec 06, T14S, R14E, SLBM,
to a point at S 660 ft. W 660 ft. from E4 corner, Sec 06, T14S, R14E, SLBM.

COMMENT: Administratively updated by State Engineer.

USES OF WATER RIGHT***** ELU -- Equivalent Livestock Unit (cow, horse, etc.) ***** EDU -- Equivalent Domestic Unit or 1 Family

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(WARNING: Water Rights makes NO claims as to the accuracy of this data.) RUN DATE: 01/26/2011

WATER RIGHT: **91-360** APPLICATION/CLAIM NO.: CERT. NO.: a529
 CHANGES: a1686 Certificate a312 (Issued:)
 a2684 Certificate a529 (Issued:)
 a4251 Certificate 529 (Issued:)

OWNERSHIP*****

NAME: East Carbon City (Public Water Supplier)
 ADDR: P.O. Box 70
 East Carbon UT 84520
 INTEREST: 100% REMARKS:

DATES, ETC.*****

LAND OWNED BY APPLICANT? COUNTY TAX ID#:
 FILED: PRIORITY: 00/00/1878 PUB BEGAN: PUB ENDED: NEWSPAPER:
 ProtestEnd: PROTESTED: [No] HEARING HLD: SE ACTION: [] ActionDate: PROOF DUE:
 EXTENSION: ELEC/PROOF: [] ELEC/PROOF: CERT/WUC: 03/25/1971 LAP, ETC: LAPS LETTER:
 RUSH LETTR: RENOVATE: RECON REQ: TYPE: []
 PD BOOK: [91-5] MAP: [58c] PUB DATE:

*TYPE -- DOCUMENT -- STATUS
 Type of Right: Decree Source of Info: Proposed Determination Status:

LOCATION OF WATER RIGHT***(Points of Diversion: Click on Location to access PLAT Program.)*****MAP VIEWER*****

FLOW: 2.0 cfs SOURCE: Grassy Trail Creek
 COUNTY: Carbon COMMON DESCRIPTION:

POINTS OF DIVERSION -- SURFACE:

(1) S 2824 ft W 1166 ft from N4 cor, Sec 07, T 14S, R 14E, SLBM
 Diverting Works:
 (2) N 1521 ft W 434 ft from SE cor, Sec 18, T 14S, R 14E, SLBM
 Diverting Works:
 (3) S 1163 ft W 644 ft from NE cor, Sec 18, T 14S, R 14E, SLBM
 Diverting Works:
 (4) S 1013 ft E 125 ft from W4 cor, Sec 01, T 15S, R 13E, SLBM
 Diverting Works:
 (5) N 1604 ft E 1245 ft from SW cor, Sec 02, T 15S, R 13E, SLBM
 Diverting Works:
 (6) N 750 ft W 1345 ft from SE cor, Sec 03, T 15S, R 13E, SLBM
 Diverting Works:
 (7) S 566 ft E 4323 ft from NW cor, Sec 09, T 15S, R 13E, SLBM
 Diverting Works:
 (8) S 1149 ft E 1320 ft from NW cor, Sec 09, T 15S, R 13E, SLBM
 Diverting Works:
 (9) N 91 ft E 2390 ft from W4 cor, Sec 06, T 15S, R 14E, SLBM
 Diverting Works:

Source:
 Source:
 Source:
 Source:
 Source:
 Source:
 Source:
 Source:
 Source:

Stream Alt Required?: No

USES OF WATER RIGHT***** ELU -- Equivalent Livestock Unit (cow, horse, etc.) ***** EDU -- Equivalent Domestic Unit or 1 Family

SUPPLEMENTAL GROUP NO.: **613926**. Water Rights Appurtenant to the following use(s):
 91-28 (CERT), 84 (CERT), 100 (WUC), 114 (WUC), 118 (CERT),
 125 (WUC), 141 (CERT), 158 (CERT), 360 (DEC), 361 (DEC),
 362 (WUC), 363 (DEC), 367 (WUC), 368 (WUC), 369 (WUC),
 372 (DEC)

IRRIGATION: Sole Supply: UNEVALUATED acres Group Total: 66.5 Div Limit: 266.0 acft. PERIOD OF USE: 06/15 TO 09/15
 Water User's Claim No. 100 is limited to the irrigation requirements of 6.54 acres.

###PLACE OF USE:	*-----NORTH WEST QUARTER-----*				*-----NORTH EAST QUARTER-----*				*-----SOUTH WEST QUARTER-----*				*-----SOUTH EAST QUARTER-----*			
	NW	NE	SW	SE	NW	NE	SW	SE	NW	NE	SW	SE	NW	NE	SW	SE
Sec 03 T 15S R 13E SLBM	*				*				*				*			
Sec 10 T 15S R 13E SLBM	*		30.0000		*		36.5000		*				*			

SUPPLEMENTAL GROUP NO.: **613974**. Water Rights Appurtenant to the following use(s):
 91-28 (CERT), 84 (CERT), 114 (WUC), 118 (CERT), 125 (WUC),
 141 (CERT), 158 (CERT), 360 (DEC), 361 (DEC), 362 (WUC),
 363 (DEC), 367 (WUC), 368 (WUC), 369 (WUC), 372 (DEC)

IRRIGATION: Sole Supply: UNEVALUATED acres Group Total: 932.4 Div Limit: 3729.6 acft. PERIOD OF USE: 04/01 TO 10/31

###PLACE OF USE:	*-----NORTH WEST QUARTER-----*				*-----NORTH EAST QUARTER-----*				*-----SOUTH WEST QUARTER-----*				*-----SOUTH EAST QUARTER-----*			
	NW	NE	SW	SE	NW	NE	SW	SE	NW	NE	SW	SE	NW	NE	SW	SE
Sec 24 T 15S R 12E SLBM	*				*				*				*			
Sec 02 T 15S R 13E SLBM	*				*		10.1000		*		6.6000		*			
Sec 03 T 15S R 13E SLBM	*				*				*		12.3000	14.0800	23.8300	34.2900	21.9500	
Sec 07 T 15S R 13E SLBM	*				*				*				*			7.4000
Sec 08 T 15S R 13E SLBM	*		39.6000		*		2.5000	20.9500	*		31.0000	11.9000	40.0000	40.0000	40.0000	38.3000
Sec 10 T 15S R 13E SLBM	*	8.0000		0.2000	*		10.1000		*		34.5000	3.2000				4.5500
Sec 11 T 15S R 13E SLBM	*	14.3000			*				*				*			

[illegible]

GROUP

SUPPLEMENTAL GROUP NO.: 613975. Water Rights Appurtenant to the following use(s):

91-28 (CERT), 37 (CERT), 84 (CERT), 114 (WUC), 118 (CERT)
 125 (WUC), 141 (CERT), 158 (CERT), 360 (DEC), 361 (DEC)
 362 (WUC), 363 (DEC), 367 (WUC), 368 (WUC), 369 (WUC)
 372 (DEC)

IRRIGATION: Sole Supply: UNEVALUATED acres Group Total: 102.85 Div Limit: 411.4 acft. PERIOD OF USE: 04/01 TO 10/31

###PLACE OF USE:															
-----NORTH WEST QUARTER-----				*-----NORTH EAST QUARTER-----*				*-----SOUTH WEST QUARTER-----*				*-----SOUTH EAST QUARTER-----*			
* NW	* NE	* SW	* SE	* NW	* NE	* SW	* SE	* NW	* NE	* SW	* SE	* NW	* NE	* SW	* SE
Sec 19 T 15S R 12E S1B1										12.1000					
Sec 24 T 15S R 12E S1B1															
Sec 25 T 15S R 12E S1B1					2.6500										3.7000
Sec 19 T 15S R 13E S1B1										12.1000					
Sec 30 T 15S R 13E S1B1	*31.0000		22.2000	4.3000*								4.7000		6.2000*	

GROUP

SUPPLEMENTAL GROUP NO.: 613976. Water Rights Appurtenant to the following use(s):

91-28 (CERT), 84 (CERT), 114 (WUC), 118 (CERT), 125 (WUC)
138 (WUC), 141 (CERT), 158 (CERT), 360 (DEC), 361 (DEC)
362 (WUC), 363 (DEC), 367 (WUC), 368 (WUC), 369 (WUC)
372 (DEC)

IRRIGATION: Sole Supply: UNEVALUATED acres Group Total: 72.2 Div Limit: 288.8 acft. PERIOD OF USE: 04/01 TO 10/31

####PLACE OF USE:															
-----NORTH WEST QUARTER-----				*-----NORTH EAST QUARTER-----*				*-----SOUTH WEST QUARTER-----*				*-----SOUTH EAST QUARTER-----*			
* NW	* NE	* SW	* SE	* NW	* NE	* SW	* SE	* NW	* NE	* SW	* SE	* NW	* NE	* SW	* SE
Sec 10 T 15S R 13E SLBM			19.0000*			130.2000	123.0000*								

GROUP

SUPPLEMENTAL GROUP NO.: 613977. Water Rights Appurtenant to the following use(s):

91-28 (CERT), 84 (CERT), 114 (WUC), 118 (CERT), 125 (WUC),
141 (CERT), 143 (CERT), 145 (CERT), 146 (WUC), 158 (CERT)
159 (CERT), 178 (CERT), 360 (DEC), 361 (DEC), 362 (WUC)
363 (DEC), 367 (WUC), 368 (WUC), 369 (WUC), 372 (DEC)

IRRIGATION: Sole Supply: UNEVALUATED acres Group Total: 15.63 Div Limit: 62.52 acft. PERIOD OF USE: 04/01 TO 10/31

###PLACE OF USE:				*-----NORTH WEST QUARTER-----*				*-----NORTH EAST QUARTER-----*				*-----SOUTH WEST QUARTER-----*				*-----SOUTH EAST QUARTER-----*			
NW	NE	SW	SE	NW	NE	SW	SE	NW	NE	SW	SE	NW	NE	SW	SE				
Sec 17 T 15S R 14E S1B1											3.8000			5.8200					
Sec 18 T 15S R 14E S1B1													5.2100	0.8000					

GROUP

SUPPLEMENTAL GROUP NO.: 613978. Water Rights Appurtenant to the following use(s):

91-28 (CERT), 84 (CERT), 114 (WUC), 118 (CERT), 125 (WUC)
137 (CERT), 141 (CERT), 158 (CERT), 360 (DEC), 361 (DEC)
362 (WUC), 363 (DEC), 367 (WUC), 368 (WUC), 369 (WUC)
372 (DEC)

IRRIGATION: Sole Supply: UNEVALUATED acres Group Total: 11.45 Div Limit: 45.8 acft. PERIOD OF USE: 04/01 TO 10/31

[illegible]

GROUP

SUPPLEMENTAL GROUP NO.: 613979. Water Rights Appurtenant to the following use(s):

91-28 (CERT), 94 (CERT), 114 (WUC), 118 (CERT), 125 (WUC),
140 (CERT), 141 (CERT), 142 (CERT), 143 (CERT), 145 (CERT)
146 (WUC), 158 (CERT), 159 (CERT), 178 (CERT), 360 (DEC)
361 (DEC), 362 (WUC), 363 (DEC), 367 (WUC), 368 (WUC)
369 (WUC), 372 (DEC).

IRRIGATION: Sole Supply: UNEVALUATED acres Group Total: 149.02 Div Limit: 582.56 acft. PERIOD OF USE: 04/01 TO 10/31

####PLACE OF USE:	*-----NORTH WEST QUARTER-----	*-----NORTH EAST QUARTER-----	*-----SOUTH WEST QUARTER-----	*-----SOUTH EAST QUARTER-----
	* NW NE SW SE	* NW NE SW SE	* NW NE SW SE	* NW NE SW SE
<u>Sec 01 T 15S R 13E SLEB</u>	*	*	*19.4100|26.3100| 6.5600|15.9300*	*20.8800| 8.6200| 8.1200
<u>Sec 02 T 15S R 13E SLEB</u>	*	*	*	*

GROUP

SUPPLEMENTAL GROUP NO.: 613980. Water Rights Appurtenant to the following use(s):

120 (CERT), 124 (CERT), 125 (WUC), 141 (CERT), 143 (CERT),
145 (CERT), 146 (WUC), 158 (CERT), 159 (CERT), 178 (CERT)
360 (DEC), 361 (DEC), 362 (WUC), 363 (DEC), 367 (WUC)
368 (WUC), 369 (WUC), 372 (DEC)

DOMESTIC: Sole Supply: UNEVALUATED EDUs Group Total: 105.0000 Div Limit: 76.44 acft. PERIOD OF USE: 01/01 TO 12/31
domestic uses in Columbia, Utah.

SUPPLEMENTAL GROUP NO.: 613981. Water Rights Appurtenant to the following use(s):

1-28 (CERT), 84 (CERT), 114 (WUC), 118 (CERT), 125 (WUC),
139 (CERT), 140 (CERT), 141 (CERT), 142 (CERT), 143 (CERT)
145 (CERT), 146 (WUC), 158 (CERT), 159 (CERT), 178 (CERT)

1/26/2011

utah.gov Online Services Agency List Business

Utah Division of Water Rights

 Search

 Select Related Information

(WARNING: Water Rights makes NO claims as to the accuracy of this data.) RUN DATE: 01/26/2011

WATER RIGHT: 91-361 APPLICATION/CLAIM NO.: CERT. NO.:

CHANGES: a18518 Approved
a1687 BAD STATUS
a2682 Certificate a313 (Issued:)
a4247 Certificate a531 (Issued:)
t18429 Expired

OWNERSHIP*****

NAME: Sunnyside Cogeneration Associates (Public Water Supplier)

ADDR: ATTN: Plant Manager

P.O. Box 159

Sunnyside UT 84539

INTEREST: 100% REMARKS:

DATES, ETC.*****

LAND OWNED BY APPLICANT? COUNTY TAX ID#:
FILED: |PRIORITY: 00/00/1878|PUB BEGAN: |PUB ENDED: |NEWSPAPER:
ProtestEnd: |PROTESTED: [No] |HEARING HLD: |SE ACTION: [|ActionDate: |PROOF DUE:
EXTENSION: |ELEC/PROOF: [|ELEC/PROOF: |CERT/WUC: |LAP, ETC: |LAPS LETTER:
RUSH LETTR: |RENOVATE: |RECON REQ: |TYPE: [|
PD BOOK: [91-5 |MAP: [58c |PUB DATE:
*TYPE -- DOCUMENT -- STATUS--

Type of Right: Decree Source of Info: Proposed Determination Status:

LOCATION OF WATER RIGHT*** (Points of Diversion: Click on Location to access PLAT Program.)*****[MAP VIEWER](#)*****

FLOW: 0.5 cfs SOURCE: Grassy Trail Creek

COUNTY: Carbon COMMON DESCRIPTION:

POINTS OF DIVERSION -- SURFACE:

(1) S 2824 ft W 1166 ft from N4 cor, Sec 07, T 14S, R 14E, SLBM

Diverting Works:

Source:

(2) S 1163 ft W 644 ft from NE cor, Sec 18, T 14S, R 14E, SLBM

Diverting Works:

Source:

(3) N 1521 ft W 1983 ft from SE cor, Sec 29, T 14S, R 14E, SLBM

Diverting Works:

Source:

(4) S 1013 ft E 125 ft from W4 cor, Sec 01, T 15S, R 13E, SLBM

Diverting Works:

Source:

(5) N 1604 ft E 1245 ft from SW cor, Sec 02, T 15S, R 13E, SLBM

Diverting Works:

Source:

(6) N 750 ft W 1345 ft from SE cor, Sec 03, T 15S, R 13E, SLBM

Diverting Works:

Source:

(7) S 566 ft E 4323 ft from NW cor, Sec 09, T 15S, R 13E, SLBM

Diverting Works:

Source:

(8) S 1149 ft E 1320 ft from NW cor, Sec 09, T 15S, R 13E, SLBM

Diverting Works:

Source:

(9) N 91 ft E 2390 ft from W4 cor, Sec 06, T 15S, R 14E, SLBM

Diverting Works:

Source:

Stream Alt Required?: No

USES OF WATER RIGHT***** ELU -- Equivalent Livestock Unit (cow, horse, etc.) ***** EDU -- Equivalent Domestic Unit or 1 Family

SUPPLEMENTAL GROUP NO.: 613926. Water Rights Appurtenant to the following use(s):

91-28(CERT), 84(CERT), 100(WUC), 114(WUC), 118(CERT)

125(WUC), 141(CERT), 158(CERT), 360(DEC), 361(DEC)

362(WUC), 363(DEC), 367(WUC), 368(WUC), 369(WUC)

372(DEC)

IRRIGATION: Sole Supply: UNEVALUATED acres Group Total: 66.5 Div Limit: 266.0 acft. PERIOD OF USE: 06/15 TO 09/15
Water User's Claim No. 100 is limited to the irrigation requirements of 6.54 acres.

###PLACE OF USE:	* NW				* NE				* SW				* SE				* NW				* NE				* SW				* SE				* NW				* NE			
Sec 03 T 15S R 13E SLBM																																								
Sec 10 T 15S R 13E SLBM																																								

SUPPLEMENTAL GROUP NO.: 613974. Water Rights Appurtenant to the following use(s):

91-28(CERT), 84(CERT), 114(WUC), 118(CERT), 125(WUC)

141(CERT), 158(CERT), 360(DEC), 361(DEC), 362(WUC)

363(DEC), 367(WUC), 368(WUC), 369(WUC), 372(DEC)

IRRIGATION: Sole Supply: UNEVALUATED acres Group Total: 932.4 Div Limit: 3729.6 acft. PERIOD OF USE: 04/01 TO 10/31

###PLACE OF USE:	* NW				* NE				* SW				* SE				* NW				* NE				* SW				* SE				* NW				* NE			
Sec 24 T 15S R 12E SLBM																																								
Sec 02 T 15S R 13E SLBM																																								
Sec 03 T 15S R 13E SLBM																																								
Sec 07 T 15S R 13E SLBM																																								

Sec 08 T 15S R 13E SLBM *	39.6000		2.5000*20.9500		31.0000	11.9000*40.0000	40.0000	40.0000	40.0000	40.0000*	4.5500		3
Sec 10 T 15S R 13E SLBM *	8.0000		0.2000	10.1000*	34.5000	3.2000							
Sec 11 T 15S R 13E SLBM *	14.3000												
Sec 17 T 15S R 13E SLBM *			40.0000										
Sec 18 T 15S R 13E SLBM *			31.5000	8.9000*40.0000	40.0000								
Sec 19 T 15S R 13E SLBM *	31.9000						40.0000*		14.8000	7.7000	12.0000*		
Sec 24 T 15S R 13E SLBM *					10.1000		6.6000*						
Sec 06 T 15S R 14E SLBM *							11.2800						

GROUP

SUPPLEMENTAL GROUP NO.: **613975**. Water Rights Appurtenant to the following use(s):
 91-28(CERT), 37(CERT), 84(CERT), 114(WUC), 118(CERT),
 125(WUC), 141(CERT), 158(CERT), 360(DEC), 361(DEC),
 362(WUC), 363(DEC), 367(WUC), 368(WUC), 369(WUC),
 372(DEC)

IRRIGATION: Sole Supply: UNEVALUATED acres															Group Total: 102.85				Div Limit: 411.4 acft.				PERIOD OF USE: 04/01 TO 10/31															
###PLACE OF USE:															*-----NORTH WEST QUARTER-----*				*-----NORTH EAST QUARTER-----*				*-----SOUTH WEST QUARTER-----*				*-----SOUTH EAST QUARTER-----*											
															* NW		* NE		* SW		* SE		* NW		* NE		* SW		* SE		* NW		* NE		* SW		* SE	
Sec 19 T 15S R 12E SLEB																																	12.1000					
Sec 24 T 15S R 12E SLEB																																					3.7000	
Sec 25 T 15S R 12E SLEB																																						
Sec 19 T 15S R 13E SLEB																							2.6500															
Sec 30 T 15S R 13E SLEB															31.0000				22.2000		4.3000								4.7000				12.1000				6.2000	

GROUP

SUPPLEMENTAL GROUP NO.: **613976**. Water Rights Appurtenant to the following use(s):
 91-28(CERT), 84(CERT), 114(WUC), 118(CERT), 125(WUC),
 138(WUC), 141(CERT), 158(CERT), 360(DEC), 361(DEC),
 362(WUC), 363(DEC), 367(WUC), 368(WUC), 369(WUC),
 372(DEC)

IRRIGATION: Sole Supply: UNEVALUATED acres														Group Total: 72.2		Div Limit: 288.8 acft.		PERIOD OF USE: 04/01 TO 10/31			
###PLACE OF USE:		*-----NORTH WEST QUARTER-----*				*-----NORTH EAST QUARTER-----*				*-----SOUTH WEST QUARTER-----*				*-----SOUTH EAST							
Sec 10 T 15S R 13E SLBM *		NW	NE	SW	SE	NW	NE	SW	SE	NW	NE	SW	SE	NW	NE						
					19.0000*			30.2000	23.0000*												

GROUP

SUPPLEMENTAL GROUP NO.: **613977**. Water Rights Appurtenant to the following use(s):
 91-28(CERT), 84(CERT), 114(WUC), 118(CERT), 125(WUC),
 141(CERT), 143(CERT), 145(CERT), 146(WUC), 158(CERT),
 159(CERT), 178(CERT), 360(DEC), 361(DEC), 362(WUC),
 363(DEC), 367(WUC), 368(WUC), 369(WUC), 372(DEC)

IRRIGATION: Sole Supply: UNEVALUATED acres															Group Total: 15.63				Div Limit: 62.52 acft.				PERIOD OF USE: 04/01 TO 10/31																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																						
###PLACE OF USE:															*-----NORTH WEST QUARTER-----*				*-----NORTH EAST QUARTER-----*				*-----SOUTH WEST QUARTER-----*				*-----SOUTH EAST																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																		
Sec 17 T 15S R 14E SLBM															*	NW		NE		SW		SE	*	NW		NE		SW		SE	*	NW		NE		SW		SE	*	NW		NE		SW		SE	*	NW		NE		SW		SE	*	NW		NE		SW		SE	*	NW		NE		SW		SE	*	NW		NE		SW		SE	*	NW		NE		SW		SE	*	NW		NE		SW		SE	*	NW		NE		SW		SE	*	NW		NE		SW		SE	*	NW		NE		SW		SE	*	NW		NE		SW		SE	*	NW		NE		SW		SE	*	NW		NE		SW		SE	*	NW		NE		SW		SE	*	NW		NE		SW		SE	*	NW		NE		SW		SE	*	NW		NE		SW		SE	*	NW		NE		SW		SE	*	NW		NE		SW		SE	*	NW		NE		SW		SE	*	NW		NE		SW		SE	*	NW		NE		SW		SE	*	NW		NE		SW		SE	*	NW		NE		SW		SE	*	NW		NE		SW		SE	*	NW		NE		SW		SE	*	NW		NE		SW		SE	*	NW		NE		SW		SE	*	NW		NE		SW		SE	*	NW		NE		SW		SE	*	NW		NE		SW		SE	*	NW		NE		SW		SE	*	NW		NE		SW		SE	*	NW		NE		SW		SE	*	NW		NE		SW		SE	*	NW		NE		SW		SE	*	NW		NE		SW		SE	*	NW		NE		SW		SE	*	NW		NE		SW		SE	*	NW		NE		SW		SE	*	NW		NE		SW		SE	*	NW		NE		SW		SE	*	NW		NE		SW		SE	*	NW		NE		SW		SE	*	NW		NE		SW		SE	*	NW		NE		SW		SE	*	NW		NE		SW		SE	*	NW		NE		SW		SE	*	NW		NE		SW		SE	*	NW		NE		SW		SE	*	NW		NE		SW		SE	*	NW		NE		SW		SE	*	NW		NE		SW		SE	*	NW		NE		SW		SE	*	NW		NE		SW		SE	*	NW		NE		SW		SE	*	NW		NE		SW		SE	*	NW		NE		SW		SE	*	NW		NE		SW		SE	*	NW		NE		SW		SE	*	NW		NE		SW		SE	*	NW		NE		SW		SE	*	NW		NE		SW		SE	*	NW		NE		SW		SE	*	NW		NE		SW		SE	*	NW		NE		SW		SE	*	NW		NE		SW		SE	*	NW		NE		SW		SE	*	NW		NE		SW		SE	*	NW		NE		SW		SE	*	NW		NE		SW		SE	*	NW		NE		SW		SE	*	NW		NE		SW		SE	*	NW		NE		SW		SE	*	NW		NE		SW		SE	*	NW		NE		SW		SE	*	NW		NE		SW		SE	*	NW		NE		SW		SE	*	NW		NE		SW		SE	*	NW		NE		SW		SE	*	NW		NE		SW		SE	*	NW		NE		SW		SE	*	NW		NE		SW		SE	*	NW		NE		SW		SE	*	NW		NE		SW		SE	*	NW		NE		SW		SE	*	NW		NE		SW		SE	*	NW		NE		SW		SE	*	NW		NE		SW		SE	*	NW		NE		SW		SE	*	NW		NE		SW		SE	*	NW		NE		SW		SE	*	NW		NE		SW		SE	*	NW		NE		SW		SE	*	NW		NE		SW		SE	*	NW		NE		SW		SE	*	NW		NE		SW		SE	*	NW		NE		SW		SE	*	NW		NE		SW		SE	*	NW		NE		SW		SE	*	NW		NE		SW		SE	*	NW		NE		SW		SE	*	NW		NE		SW		SE	*	NW		NE		SW		SE	*	NW		NE		SW		SE	*	NW		NE		SW		SE	*	NW		NE		SW		SE	*	NW		NE		SW		SE	*	NW		NE		SW		SE	*	NW		NE		SW		SE	*	NW		NE		SW		SE	*	NW		NE		SW		SE	*	NW		NE		SW		SE	*	NW		NE		SW		SE	*	NW		NE		SW		SE	*	NW		NE		SW		SE	*	NW		NE		SW		SE	*	NW		NE		SW		SE	*	NW		NE		SW		SE	*	NW		NE		SW		SE	*	NW		NE		SW		SE	*	NW		NE		SW		SE	*	NW		NE		SW		SE	*	NW		NE		SW		SE	*	NW		NE		SW		SE	*	NW		NE		SW		SE	*	NW		NE		SW		SE	*	NW		NE		SW		SE	*	NW		NE		SW		SE	*	NW		NE		SW		SE	*	NW		NE		SW		SE	*	NW		NE		SW		SE	*	NW		NE		SW		SE	*	NW		NE		SW		SE	*	NW		NE		SW		SE	*	NW		NE		SW		SE	*	NW		NE		SW		SE	*	NW		NE		SW		SE	*	NW		NE		SW		SE	*	NW		NE		SW		SE	*	NW		NE		SW		SE	*	NW		NE		SW		SE	*	NW		NE		SW	

GROUP

SUPPLEMENTAL GROUP NO.: **613978**. Water Rights Appurtenant to the following use(s):
 91-28(CERT), 84(CERT), 114(WUC), 118(CERT), 125(WUC),
 137(CERT), 141(CERT), 158(CERT), 360(DEC), 361(DEC),
 362(WUC), 363(DEC), 367(WUC), 368(WUC), 369(WUC),
 372(DEC)

IRRIGATION: Sole Supply: UNEVALUATED acres															Group Total: 11.45				Div Limit: 45.8 acft.				PERIOD OF USE: 04/01 TO 10/31			
###PLACE OF USE:		*-----NORTH WEST QUARTER-----*				*-----NORTH EAST QUARTER-----*				*-----SOUTH WEST QUARTER-----*				*-----SOUTH EAST												
* NW		NE		SW		SE		* NW		NE		SW		SE		* NW		NE								
Sec 02 T 15S R 13E SLBM *																		11.4500								
																		GROUP								

GROUP

SUPPLEMENTAL GROUP NO.: **613979**. Water Rights Appurtenant to the following use(s):
 91-28(CERT), 84(CERT), 114(WUC), 118(CERT), 125(WUC),
 140(CERT), 141(CERT), 142(CERT), 143(CERT), 145(CERT),
 146(WUC), 158(CERT), 159(CERT), 178(CERT), 360(DEC),
 361(DEC), 362(WUC), 363(DEC), 367(WUC), 368(WUC),
 369(WUC), 372(DEC)

IRRIGATION: Sole Supply: UNEVALUATED acres															Group Total: 149.02				Div Limit: 582.56 acft.				PERIOD OF USE: 04/01 TO 10/31																			
###PLACE OF USE:															*-----NORTH WEST QUARTER-----*				*-----NORTH EAST QUARTER-----*				*-----SOUTH WEST QUARTER-----*				*-----SOUTH EAST															
* NW NE SW SE															* NW NE SW SE				* NW NE SW SE				* NW NE SW SE																			
Sec 01 T 15S R 13E SLBM																			19.4100				26.3100				6.5600				15.9300*20.8800				8.6200				8			
Sec 02 T 15S R 13E SLBM																																							26			
																																			GROUP							

GROUP

SUPPLEMENTAL GROUP NO.: **613980**. Water Rights Appurtenant to the following use(s):
 91-19(CERT), 28(CERT), 84(CERT), 114(WUC), 118(CERT),
 120(CERT), 124(CERT), 125(WUC), 141(CERT), 143(CERT),
 145(CERT), 146(WUC), 158(CERT), 159(CERT), 178(CERT),
 360(DEC), 361(DEC), 362(WUC), 363(DEC), 367(WUC),
 368(WUC), 369(WUC), 372(DEC)

DOMESTIC: Sole Supply: UNEVALUATED EDUs Group Total: 105.0000 Div Limit: 76.44 acft. PERIOD OF USE: 01/01 TO 12/31
 Domestic uses in Columbia, Utah.

SUPPLEMENTAL GROUP NO.: **613981**. Water Rights Appurtenant to the following use(s):

91-28 (CERT), 84 (CERT), 114 (WUC), 118 (CERT), 125 (WUC),
139 (CERT), 140 (CERT), 141 (CERT), 142 (CERT), 143 (CERT)
145 (CERT), 146 (WUC), 158 (CERT), 159 (CERT), 178 (CERT).
360 (DEC), 361 (DEC), 362 (WUC), 363 (DEC), 367 (WUC)
368 (WUC), 369 (WUC), 372 (DEC)

DOMESTIC: Sole Supply: UNEVALUATED EDUS Group Total: 770.0000 Div Limit: 560.56 acft. PERIOD OF USE: 01/01 TO 12/31
Flow for domestic is part of flow for irrigation. Domestic use at unincorporated areas at
Sunnyside and East Carbon.

SUPPLEMENTAL GROUP NO.: 613983. Water Rights Appurtenant to the following use(s):

91-19 (CERT), 28 (CERT), 84 (CERT), 99 (CERT), 114 (WUC),
118 (CERT), 125 (WUC), 141 (CERT), 143 (CERT), 145 (CERT),
146 (WUC), 158 (CERT), 159 (CERT), 178 (CERT), 332 (UGWC)
360 (DEC), 361 (DEC), 362 (WUC), 363 (DEC), 367 (WUC)
368 (WUC), 369 (WUC), 372 (DEC)

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.....
MINING:  DISTRICT: Columbia      NAME: Columbia      PERIOD OF USE: 01/01 TO 12/31
          ORES: coal

```

Acre Feet Contributed by this Right for this Use: Unevaluated

SUPPLEMENTAL GROUP NO.: 613984. Water Rights Appurtenant to the following use(s):

91-28 (CERT), 84 (CERT), 114 (WUC), 118 (CERT), 125 (WUC)
141 (CERT), 143 (CERT), 145 (CERT), 158 (CERT), 159 (CERT)
360 (DEC), 361 (DEC), 362 (WUC), 363 (DEC), 367 (WUC)
368 (WUC), 369 (WUC), 372 (DEC)

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.....
MINING:    DISTRICT: Sunnyside          NAME: Sunnyside          PERIOD OF USE: 01/01 TO 12/31
           RES: coal

```

Acre Feet Contributed by this Right for this Use: Unevaluated

SUPPLEMENTAL GROUP NO.: 613985. Water Rights Appurtenant to the following use(s):

91-28 (CERT), 84 (CERT), 114 (WUC), 118 (CERT), 125 (WUC)
141 (CERT), 143 (CERT), 145 (CERT), 146 (WUC), 148 (CERT)
149 (CERT), 150 (CERT), 158 (CERT), 159 (CERT), 178 (CERT)
183 (CERT), 360 (DEC), 361 (DEC), 362 (WUC), 363 (DEC)
367 (WUC), 368 (WUC), 369 (WUC), 372 (DEC)

MINING:	DISTRICT: Columbia	NAME: Horse Canyon	PERIOD OF USE: 01/01 TO 12/31
	ORES: Coal		

Acre Feet Contributed by this Right for this Use: Unevaluated

Administratively changed on Feb 14, 2007, by deleting the Domestic entry for 800 persons, and adding it to this Mining entry. The Mining was to employ and/or service the 800 persons.

INDUSTRIAL: In conjunction with the coal mining occuring at Horse Canyon. PERIOD OF USE: 01/01 TO 12/31

Acre Feet Contributed by this Right for this Use: Unevaluated

SUPPLEMENTAL GROUP NO.: 614007. Water Rights Appurtenant to the following use(s):

91-28 (CERT), 84 (CERT), 114 (WUC), 118 (CERT), 125 (WUC)
141 (CERT), 146 (WUC), 158 (CERT), 360 (DEC), 361 (DEC)
362 (WUC), 363 (DEC), 367 (WUC), 368 (WUC), 369 (WUC)
372 (DEC)

IRRIGATION: Sole Supply: UNEVALUATED acres Group Total: 11.28 Div Limit: 45.12 acft. PERIOD OF USE: 04/01 TO 10/15

###PLACE OF USE:				*-----NORTH WEST QUARTER-----*				*-----NORTH EAST QUARTER-----*				*-----SOUTH WEST QUARTER-----*				*-----SOUTH EAST	
* NW	NE	SW	SE	* NW	NE	SW	SE	* NW	NE	SW	SE	* NW	NE				
<u>Sec 06 T 15S R 14E SLBM</u>								\$11.2800									
																GROUP	

SUPPLEMENTAL GROUP NO.: 614158. Water Rights Appurtenant to the following use(s):

91-28 (CERT), 84 (CERT), 114 (WUC), 118 (CERT), 125 (WUC)
141 (CERT), 143 (CERT), 144 (CERT), 145 (CERT), 146 (WUC)
158 (CERT), 178 (CERT), 239 (APP), 360 (DEC), 361 (DEC)
362 (WUC), 363 (DEC), 367 (WUC), 368 (WUC), 369 (WUC)
 372 (DEC)

MUNICIPAL: Sunnyside

Acre Feet Contributed by this Right for this Use: Unevaluated

SUPPLEMENTAL GROUP NO.: 615817. Water Rights Appurtenant to the following use(s):

91-37 (CERT), 99 (CERT), 118 (CERT), 139 (CERT), 143 (CERT),
145 (CERT), 158 (CERT), 159 (CERT), 361 (DEC), 364 (DEC),
372 (DEC), 3522 (DIL), 3524 (DIL), 3761 (DIL), 4941 (UNAP),
4942 (WD)

POWER:	SCA Steam Generation Power Plant, rated at 58 MW.	PERIOD OF USE:	01/01 TO 12/31
	CFS Contributed by this Right for this Use: Unevaluated		

CFS Contributed by this Right for this Use: Unevaluated

###PLACE OF USE:																
-----NORTH WEST QUARTER-----				*-----NORTH EAST QUARTER-----*				*-----SOUTH WEST QUARTER-----*				*-----SOUTH EAST QUARTER-----*				
* NW	NE	SW	SE	* NW	NE	SW	SE	* NW	NE	SW	SE	* NW	NE	SW	SE	
Sec 06 T 15S R 14E SLBM *				*				*				X		X		X
GROUP																

This Right (91-361) has an evaluated sole-supply total for irrigation of 0.0000 acres.

This Right (91-361) is a member of 15 supplemental water right groups with irrigated acreage totaling 1361.3300 acres.

Storage from 3/15 to 12/15, inclusive, in Grassy Trail Reservoir with a maximum capacity of 916.000 acre-feet, located in:

Height of Dam:	NORTH-WEST¼	NORTH-EAST¼	SOUTH-WEST¼	SOUTH-EAST¼
Area Inundated:	NW NE SW SE	NW NE SW SE	NW NE SW SE	NW NE SW SE

Sec 07 T 14S R 14E SLBM * X: X: X: X* * : : : * * X: X: : * * : : : *

Small Dam Required?: No

=====

OTHER COMMENTS*****

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Also included in Claim is Certificate Number a-531, and George Christensen
Decree, November 7, 1917.
WUC 91-361 is limited to the irrigation requirements of 25.0 acres.

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Utah Division of Water Rights

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THIS RIGHT IS BEING PROTESTED IN A PROPOSED DETERMINATION BOOK!!!

(WARNING: Water Rights makes NO claims as to the accuracy of this data.) RUN DATE: 01/26/2011

WATER RIGHT: **91-362** APPLICATION/CLAIM NO.: CERT. NO.:
 CHANGES: a3047 Certificate a523 (Issued:)
 a4238 Certificate a523 (Issued:)

OWNERSHIP*****

NAME: Sunnyside City (Public Water Supplier)
 ADDR: P.O. Box 69
 Sunnyside UT 84539
 INTEREST: 100% REMARKS:

DATES, ETC.*****

LAND OWNED BY APPLICANT? COUNTY TAX ID#:
 FILED: PRIORITY: / /1878|PUB BEGAN: |PUB ENDED: |NEWSPAPER:
 ProtestEnd: |PROTESTED: [No] |HEARING HLD: |SE ACTION: { |ActionDate: |PROOF DUE:
 EXTENSION: |ELEC/PROOF:[]|ELEC/PROOF: |CERT/WUC: 10/28/1970|LAP, ETC: |LAPS LETTER:
 RUSH LETTR: |RENOVATE: |RECON REQ: |TYPE: []
 PD BOOK: [91-5] |MAP: [58c] |PUB DATE:

*TYPE -- DOCUMENT -- STATUS--

Type of Right: Decree Source of Info: Proposed Determination Status: Water User's Claim

LOCATION OF WATER RIGHT*** (Points of Diversion: Click on Location to access PLAT Program.)*****MAP VIEWER*****

FLOW: 1.0 cfs SOURCE: Grassy Trail Creek
 COUNTY: Carbon COMMON DESCRIPTION:

POINTS OF DIVERSION -- SURFACE:

(1) S 2824 ft W 1166 ft from N4 cor, Sec 07, T 14S, R 14E, SLBM
 Diverting Works:
 (2) S 1163 ft W 644 ft from NE cor, Sec 18, T 14S, R 14E, SLBM
 Diverting Works:
 (3) N 1521 ft W 1983 ft from SE cor, Sec 29, T 14S, R 14E, SLBM
 Diverting Works:
 (4) S 1013 ft E 125 ft from W4 cor, Sec 01, T 15S, R 13E, SLBM
 Diverting Works:
 (5) N 1604 ft E 1245 ft from SW cor, Sec 02, T 15S, R 13E, SLBM
 Diverting Works:
 (6) N 750 ft W 1345 ft from SE cor, Sec 03, T 15S, R 13E, SLBM
 Diverting Works:
 (7) S 566 ft E 4323 ft from NW cor, Sec 09, T 15S, R 13E, SLBM
 Diverting Works:
 (8) S 1149 ft E 1320 ft from NW cor, Sec 09, T 15S, R 13E, SLBM
 Diverting Works:
 (9) N 91 ft E 2390 ft from W4 cor, Sec 06, T 15S, R 14E, SLBM
 Diverting Works:

Source:

Source:

Source:

Source:

Source:

Source:

Source:

Source:

Source:

Stream Alt Required?: No

USES OF WATER RIGHT***** ELU -- Equivalent Livestock Unit (cow, horse, etc.) ***** EDU -- Equivalent Domestic Unit or 1 Family

SUPPLEMENTAL GROUP NO.: 613926. Water Rights Appurtenant to the following use(s):

91-28(CERT), 84(CERT), 100(WUC), 114(WUC), 118(CERT)
 125(WUC), 141(CERT), 158(CERT), 360(DEC), 361(DEC)
 362(WUC), 363(DEC), 367(WUC), 368(WUC), 369(WUC)
 372(DEC)

IRRIGATION: Sole Supply: UNEVALUATED acres Group Total: 66.5 Div Limit: 266.0 acft. PERIOD OF USE: 06/15 TO 09/15
 Water User's Claim No. 100 is limited to the irrigation requirements of 6.54 acres.

###PLACE OF USE:	NORTH WEST QUARTER				NORTH EAST QUARTER				SOUTH WEST QUARTER				SOUTH EAST	
	NW	NE	SW	SE	NW	NE	SW	SE	NW	NE	SW	SE	NW	NE
Sec 03 T 15S R 13E SLBM	*				*				*				*	
Sec 10 T 15S R 13E SLBM	*		30.0000		*		36.5000		*				*	

GROUP

SUPPLEMENTAL GROUP NO.: 613974. Water Rights Appurtenant to the following use(s):

91-28(CERT), 84(CERT), 114(WUC), 118(CERT), 125(WUC)
 141(CERT), 158(CERT), 360(DEC), 361(DEC), 362(WUC)
 363(DEC), 367(WUC), 368(WUC), 369(WUC), 372(DEC)

IRRIGATION: Sole Supply: UNEVALUATED acres Group Total: 932.4 Div Limit: 3729.6 acft. PERIOD OF USE: 04/01 TO 10/31

###PLACE OF USE:	NORTH WEST QUARTER				NORTH EAST QUARTER				SOUTH WEST QUARTER				SOUTH EAST	
	NW	NE	SW	SE	NW	NE	SW	SE	NW	NE	SW	SE	NW	NE
Sec 24 T 15S R 12E SLBM	*				*				*				*	
Sec 02 T 15S R 13E SLBM	*				*		10.1000		*				*	
Sec 03 T 15S R 13E SLBM	*				*				*		12.3000	14.0800	23.8300	34.2900
Sec 07 T 15S R 13E SLBM	*				*				*				*	7.4000
														2
														40

Sec 08 T 15S R 13E SLBM *	39.6000		2.5000*20.9500		31.0000	11.9000*40.0000	40.0000	40.0000	40.0000	40.0000*	4.5500		3
Sec 10 T 15S R 13E SLBM *	8.0000	0.2000	10.1000*	34.5000	3.2000								
Sec 11 T 15S R 13E SLBM *	14.3000												
Sec 17 T 15S R 13E SLBM *		40.0000											
Sec 18 T 15S R 13E SLBM *		31.5000	8.9000*40.0000	40.0000		40.0000*		14.8000	7.7000	12.0000*			
Sec 19 T 15S R 13E SLBM *	31.9000												
Sec 24 T 15S R 13E SLBM *				10.1000		6.6000*							
Sec 06 T 15S R 14E SLBM *						11.2800							

GROUP

SUPPLEMENTAL GROUP NO.: **613975**. Water Rights Appurtenant to the following use(s):

91-28(CERT), 37(CERT), 84(CERT), 114(WUC), 118(CERT)
 125(WUC), 141(CERT), 158(CERT), 360(DEC), 361(DEC)
 362(WUC), 363(DEC), 367(WUC), 368(WUC), 369(WUC)
 372(DEC)

IRRIGATION: Sole Supply: UNEVALUATED acres Group Total: 102.85 Div Limit: 411.4 acft. PERIOD OF USE: 04/01 TO 10/31

###PLACE OF USE:	*-----NORTH WEST QUARTER-----*				*-----NORTH EAST QUARTER-----*				*-----SOUTH WEST QUARTER-----*				*-----SOUTH EAST	
	NW	NE	SW	SE	NW	NE	SW	SE	NW	NE	SW	SE	NW	NE
Sec 19 T 15S R 12E SLBM *											12.1000			
Sec 24 T 15S R 12E SLBM *														3.7000
Sec 25 T 15S R 12E SLBM *					2.6500									
Sec 19 T 15S R 13E SLBM *											12.1000			
Sec 30 T 15S R 13E SLBM *	31.0000		22.2000	4.3000*					4.7000			6.2000*		

GROUP

SUPPLEMENTAL GROUP NO.: **613976**. Water Rights Appurtenant to the following use(s):

91-28(CERT), 84(CERT), 114(WUC), 118(CERT), 125(WUC)
 138(WUC), 141(CERT), 158(CERT), 360(DEC), 361(DEC)
 362(WUC), 363(DEC), 367(WUC), 368(WUC), 369(WUC)
 372(DEC)

IRRIGATION: Sole Supply: UNEVALUATED acres Group Total: 72.2 Div Limit: 288.8 acft. PERIOD OF USE: 04/01 TO 10/31

###PLACE OF USE:	*-----NORTH WEST QUARTER-----*				*-----NORTH EAST QUARTER-----*				*-----SOUTH WEST QUARTER-----*				*-----SOUTH EAST	
	NW	NE	SW	SE	NW	NE	SW	SE	NW	NE	SW	SE	NW	NE
Sec 10 T 15S R 13E SLBM *				19.0000*			30.2000	23.0000*						

GROUP

SUPPLEMENTAL GROUP NO.: **613977**. Water Rights Appurtenant to the following use(s):

91-28(CERT), 84(CERT), 114(WUC), 118(CERT), 125(WUC)
 141(CERT), 143(CERT), 145(CERT), 146(WUC), 158(CERT)
 159(CERT), 178(CERT), 360(DEC), 361(DEC), 362(WUC)
 363(DEC), 367(WUC), 368(WUC), 369(WUC), 372(DEC)

IRRIGATION: Sole Supply: UNEVALUATED acres Group Total: 15.63 Div Limit: 62.52 acft. PERIOD OF USE: 04/01 TO 10/31

###PLACE OF USE:	*-----NORTH WEST QUARTER-----*				*-----NORTH EAST QUARTER-----*				*-----SOUTH WEST QUARTER-----*				*-----SOUTH EAST	
	NW	NE	SW	SE	NW	NE	SW	SE	NW	NE	SW	SE	NW	NE
Sec 17 T 15S R 14E SLBM *									3.8000		5.8200			
Sec 18 T 15S R 14E SLBM *										5.2100		0.8000*		

GROUP

SUPPLEMENTAL GROUP NO.: **613978**. Water Rights Appurtenant to the following use(s):

91-28(CERT), 84(CERT), 114(WUC), 118(CERT), 125(WUC)
 137(CERT), 141(CERT), 158(CERT), 360(DEC), 361(DEC)
 362(WUC), 363(DEC), 367(WUC), 368(WUC), 369(WUC)
 372(DEC)

IRRIGATION: Sole Supply: UNEVALUATED acres Group Total: 11.45 Div Limit: 45.8 acft. PERIOD OF USE: 04/01 TO 10/31

###PLACE OF USE:	*-----NORTH WEST QUARTER-----*				*-----NORTH EAST QUARTER-----*				*-----SOUTH WEST QUARTER-----*				*-----SOUTH EAST	
	NW	NE	SW	SE	NW	NE	SW	SE	NW	NE	SW	SE	NW	NE
Sec 02 T 15S R 13E SLBM *													11.4500	

GROUP

SUPPLEMENTAL GROUP NO.: **613979**. Water Rights Appurtenant to the following use(s):

91-28(CERT), 84(CERT), 114(WUC), 118(CERT), 125(WUC)
 140(CERT), 141(CERT), 142(CERT), 143(CERT), 145(CERT)
 146(WUC), 158(CERT), 159(CERT), 178(CERT), 360(DEC)
 361(DEC), 362(WUC), 363(DEC), 367(WUC), 368(WUC)
 369(WUC), 372(DEC)

IRRIGATION: Sole Supply: UNEVALUATED acres Group Total: 149.02 Div Limit: 582.56 acft. PERIOD OF USE: 04/01 TO 10/31

###PLACE OF USE:	*-----NORTH WEST QUARTER-----*				*-----NORTH EAST QUARTER-----*				*-----SOUTH WEST QUARTER-----*				*-----SOUTH EAST	
	NW	NE	SW	SE	NW	NE	SW	SE	NW	NE	SW	SE	NW	NE
Sec 01 T 15S R 13E SLBM *									19.4100	26.3100	6.5600	15.9300*20.8800	8.6200	8
Sec 02 T 15S R 13E SLBM *														126

GROUP

SUPPLEMENTAL GROUP NO.: **613980**. Water Rights Appurtenant to the following use(s):

91-19(CERT), 28(CERT), 84(CERT), 114(WUC), 118(CERT)
 120(CERT), 124(CERT), 125(WUC), 141(CERT), 143(CERT)
 145(CERT), 146(WUC), 158(CERT), 159(CERT), 178(CERT)
 360(DEC), 361(DEC), 362(WUC), 363(DEC), 367(WUC)
 368(WUC), 369(WUC), 372(DEC)

DOMESTIC: Sole Supply: UNEVALUATED EDUS Group Total: 105.0000 Div Limit: 76.44 acft. PERIOD OF USE: 01/01 TO 12/31
 Domestic uses in Columbia, Utah.

SUPPLEMENTAL GROUP NO.: **613981**. Water Rights Appurtenant to the following use(s):

91-28 (CERT), 84 (CERT), 114 (WUC), 118 (CERT), 125 (WUC)
 139 (CERT), 140 (CERT), 141 (CERT), 142 (CERT), 143 (CERT)
 145 (CERT), 146 (WUC), 158 (CERT), 159 (CERT), 178 (CERT)
 360 (DEC), 361 (DEC), 362 (WUC), 363 (DEC), 367 (WUC)
 368 (WUC), 369 (WUC), 372 (DEC)

DOMESTIC: Sole Supply: UNEVALUATED EDUs Group Total: 770.0000 Div Limit: 560.56 acft. PERIOD OF USE: 01/01 TO 12/31
 Flow for domestic is part of flow for irrigation. Domestic use at unincorporated areas at
 Sunnyside and East Carbon.

SUPPLEMENTAL GROUP NO.: **613983**. Water Rights Appurtenant to the following use(s):
 91-19 (CERT), 28 (CERT), 84 (CERT), 99 (CERT), 114 (WUC)
 118 (CERT), 125 (WUC), 141 (CERT), 143 (CERT), 145 (CERT)
 146 (WUC), 158 (CERT), 159 (CERT), 178 (CERT), 332 (UGWC)
 360 (DEC), 361 (DEC), 362 (WUC), 363 (DEC), 367 (WUC)
 368 (WUC), 369 (WUC), 372 (DEC)

MINING: DISTRICT: Columbia NAME: Columbia PERIOD OF USE: 01/01 TO 12/31
 ORES: coal
 Acre Feet Contributed by this Right for this Use: Unevaluated

SUPPLEMENTAL GROUP NO.: **613984**. Water Rights Appurtenant to the following use(s):
 91-28 (CERT), 84 (CERT), 114 (WUC), 118 (CERT), 125 (WUC)
 141 (CERT), 143 (CERT), 145 (CERT), 158 (CERT), 159 (CERT)
 360 (DEC), 361 (DEC), 362 (WUC), 363 (DEC), 367 (WUC)
 368 (WUC), 369 (WUC), 372 (DEC)

MINING: DISTRICT: Sunnyside NAME: Sunnyside PERIOD OF USE: 01/01 TO 12/31
 ORES: coal
 Acre Feet Contributed by this Right for this Use: Unevaluated

SUPPLEMENTAL GROUP NO.: **613985**. Water Rights Appurtenant to the following use(s):
 91-28 (CERT), 84 (CERT), 114 (WUC), 118 (CERT), 125 (WUC)
 141 (CERT), 143 (CERT), 145 (CERT), 146 (WUC), 148 (CERT)
 149 (CERT), 150 (CERT), 158 (CERT), 159 (CERT), 178 (CERT)
 183 (CERT), 360 (DEC), 361 (DEC), 362 (WUC), 363 (DEC)
 367 (WUC), 368 (WUC), 369 (WUC), 372 (DEC)

MINING: DISTRICT: Columbia NAME: Horse Canyon PERIOD OF USE: 01/01 TO 12/31
 ORES: Coal
 Acre Feet Contributed by this Right for this Use: Unevaluated
 Administratively changed on Feb 14, 2007, by deleting the Domestic entry for 800 persons, and
 adding it to this Mining entry. The Mining was to employ and/or service the 800 persons.

INDUSTRIAL: In conjunction with the coal mining occurring at Horse Canyon.
 Acre Feet Contributed by this Right for this Use: Unevaluated PERIOD OF USE: 01/01 TO 12/31

SUPPLEMENTAL GROUP NO.: **614007**. Water Rights Appurtenant to the following use(s):
 91-28 (CERT), 84 (CERT), 114 (WUC), 118 (CERT), 125 (WUC)
 141 (CERT), 146 (WUC), 158 (CERT), 360 (DEC), 361 (DEC)
 362 (WUC), 363 (DEC), 367 (WUC), 368 (WUC), 369 (WUC)
 372 (DEC)

IRRIGATION: Sole Supply: UNEVALUATED acres Group Total: 11.28 Div Limit: 45.12 acft. PERIOD OF USE: 04/01 TO 10/15
 ###PLACE OF USE: * NORTH WEST QUARTER * NORTH EAST QUARTER * SOUTH WEST QUARTER * SOUTH EAST
 * NW NE SW SE * NW NE SW SE * NW NE SW SE * NW NE SW SE
 Sec 06 T 15S R 14E SLBM * 11.2800

SUPPLEMENTAL GROUP NO.: **614158**. Water Rights Appurtenant to the following use(s):
 91-28 (CERT), 84 (CERT), 114 (WUC), 118 (CERT), 125 (WUC)
 141 (CERT), 143 (CERT), 144 (CERT), 145 (CERT), 146 (WUC)
 158 (CERT), 178 (CERT), 239 (APP), 360 (DEC), 361 (DEC)
 362 (WUC), 363 (DEC), 367 (WUC), 368 (WUC), 369 (WUC)
 372 (DEC)

MUNICIPAL: Sunnyside PERIOD OF USE: 01/01 TO 12/31
 Acre Feet Contributed by this Right for this Use: Unevaluated

SUPPLEMENTAL GROUP NO.: **614354**. Water Rights Appurtenant to the following use(s):
 91-28 (CERT), 84 (CERT), 114 (WUC), 125 (WUC), 231 (CERT)
 362 (WUC), 367 (WUC), 368 (WUC), 369 (WUC)

IRRIGATION: Sole Supply: UNEVALUATED acres Group Total: 222.1 Div Limit: 0.0 acft. PERIOD OF USE: 04/01 TO 10/15
 WUC 91-231 is limited to the irrigation requirements of 160.0 acres.

INDUSTRIAL: Water uses related to coal mining. PERIOD OF USE: 01/01 TO 12/31
 Acre Feet Contributed by this Right for this Use: Unevaluated

###PLACE OF USE: * NORTH WEST QUARTER * NORTH EAST QUARTER * SOUTH WEST QUARTER * SOUTH EAST
 * NW NE SW SE * NW NE SW SE * NW NE SW SE * NW NE SW SE
 Sec 13 T 14S R 14E SLBM *X |X| |X| |X| *X| |X| |X| |X| *X| |X| |X| |X| *X| |X| |X| |X|
 Sec 17 T 14S R 14E SLBM *X |X| |X| |X| *X| |X| |X| |X| *X| |X| |X| |X| *X| |X| |X| |X|
 Sec 18 T 14S R 14E SLBM *X |X| |X| |X| *X| |X| |X| |X| *X| |X| |X| |X| *X| |X| |X| |X|
 Sec 19 T 14S R 14E SLBM *X |X| |X| |X| *X| |X| |X| |X| *X| |X| |X| |X| *X| |X| |X| |X|
 Sec 20 T 14S R 14E SLBM *X |X| |X| |X| *X| |X| |X| |X| *X| |X| |X| |X| *X| |X| |X| |X|
 Sec 21 T 14S R 14E SLBM *X |X| |X| |X| *X| |X| |X| |X| *X| |X| |X| |X| *X| |X| |X| |X|
 Sec 24 T 14S R 14E SLBM *X |X| |X| |X| *X| |X| |X| |X| *X| |X| |X| |X| *X| |X| |X| |X|
 Sec 28 T 14S R 14E SLBM *X |X| |X| |X| *X| |X| |X| |X| *X| |X| |X| |X| *X| |X| |X| |X|
 Sec 29 T 14S R 14E SLBM *X |X| |X| |X| *X| |X| |X| |X| *X| |X| |X| |X| *X| |X| |X| |X|

GROUPE

This Right (91-362) is a member of 15 supplemental water right groups with irrigated acreage totaling 1583.4300 acres.

Height of Dam:	89	NORTH-WEST $\frac{1}{4}$	NORTH-EAST $\frac{1}{4}$	SOUTH-WEST $\frac{1}{4}$	SOUTH-EAST $\frac{1}{4}$
----------------	----	--------------------------	--------------------------	--------------------------	--------------------------

Area Inundated:	NW NE SW SE	NW NE SW SE	NW NE SW SE	NW NE SW SE
Sec 07 T 14S R 14E SLBM	* X: X: X: X*	* : : : *	* X: X: : *	* : : : *

Small Dam Required?: No

OTHER COMMENTS*****

Also included in application is George Christensen Decree, 11/7/1917. WUC 91-362 is limited to the irrigation requirements of 50.0 acres.



Online Services Agency List Business

Utah Division of Water Rights

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Select Related Information

(WARNING: Water Rights makes NO claims as to the accuracy of this data.) RUN DATE: 01/26/2011

WATER RIGHT: **91-363** APPLICATION/CLAIM NO.: CERT. NO.:
 CHANGES: a1688 Certificate a314 (Issued:)
a2685 Certificate a530 (Issued:)
a4249 Certificate a530 (Issued:)

OWNERSHIP*****

NAME: East Carbon City (Public Water Supplier)
 ADDR: P.O. Box 70
 East Carbon UT 84520

DATES, ETC.*****

LAND OWNED BY APPLICANT? COUNTY TAX ID#:
 FILED: |PRIORITY: 00/00/1878|PUB BEGAN: |PUB ENDED: |NEWSPAPER:
 ProtestEnd: |PROTESTED: [No] |HEARING HLD: |SE ACTION: [|ActionDate:
 EXTENSION: |ELEC/PROOF:[|ELEC/PROOF: |CERT/WUC: 03/25/1971|LAP, ETC: |PROOF DUE:
 RUSH LETTR: |RENOVATE: |RECON REQ: |TYPE: [|LAPS LETTER:
 PD BOOK: [91-5] |MAP: [58c] |PUB DATE:
 *TYPE -- DOCUMENT -- STATUS

Type of Right: Decree Source of Info: Proposed Determination Status:

LOCATION OF WATER RIGHT*** (Points of Diversion: Click on Location to access PLAT Program.)*****MAP VIEWER*****

FLOW: 1.5 cfs SOURCE: Grassy Trail Creek
 COUNTY: Carbon COMMON DESCRIPTION:

POINTS OF DIVERSION -- SURFACE:

(1) S 2824 ft W 1166 ft from N4 cor, Sec 07, T 14S, R 14E, SLBM

Diverting Works:

Source:

(2) S 1163 ft W 644 ft from NE cor, Sec 19, T 14S, R 14E, SLBM

Diverting Works:

Source:

(3) N 1521 ft W 1983 ft from SE cor, Sec 29, T 14S, R 14E, SLBM

Diverting Works:

Source:

(4) S 1013 ft E 125 ft from W4 cor, Sec 01, T 15S, R 13E, SLBM

Diverting Works:

Source:

(5) N 1604 ft E 1245 ft from SW cor, Sec 02, T 15S, R 13E, SLBM

Diverting Works:

Source:

(6) N 750 ft W 1345 ft from SE cor, Sec 03, T 15S, R 13E, SLBM

Diverting Works:

Source:

(7) S 566 ft E 4323 ft from NW cor, Sec 09, T 15S, R 13E, SLBM

Diverting Works:

Source:

(8) S 1149 ft E 1320 ft from NW cor, Sec 09, T 15S, R 13E, SLBM

Diverting Works:

Source:

(9) N 91 ft E 2390 ft from W4 cor, Sec 06, T 15S, R 14E, SLBM

Diverting Works:

Source:

Stream Alt Required?: No

USES OF WATER RIGHT***** ELU -- Equivalent Livestock Unit (cow, horse, etc.) ***** EDU -- Equivalent Domestic Unit or 1 Family

utah 800 Online Services Agency List Business

Utah Division of Water Rights

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Select Related Information

THIS RIGHT IS BEING PROTESTED IN A PROPOSED DETERMINATION BOOK!!!

(WARNING: Water Rights makes NO claims as to the accuracy of this data.) RUN DATE: 01/26/2011

WATER RIGHT: 91-367 APPLICATION/CLAIM NO.: CERT. NO.:
CHANGES: a3172 Certificate a524 (Issued:)
a4237 Certificate a524 (Issued:)

OWNERSHIP*****

NAME: Sunnyside City (Public Water Supplier)
ADDR: P.O. Box 69
Sunnyside UT 84539
INTEREST: 100% REMARKS:

DATES, ETC.*****

LAND OWNED BY APPLICANT? COUNTY TAX ID#:
FILED: PRIORITY: / 1888(PUB BEGAN: PUB ENDED: NEWSPAPER:
ProtestEnd: [PROTESTED: [No] HEARING HLD: SE ACTION: [] ActionDate: PROOF DUE:
EXTENSION: ELEC/PROOF: [] ELEC/PROOF: CERT/WUC: 10/28/1970 LAP, ETC: LAPS LETTER:
RUSH LETTR: RENOVATE: RECON REQ: TYPE: []
PD BOOK: [91-5] MAP: [58c] PUB DATE:
*TYPE -- DOCUMENT -- STATUS-----
Type of Right: Decree Source of Info: Proposed Determination Status: Water User's Claim

LOCATION OF WATER RIGHT***(Points of Diversion: Click on Location to access PLAT Program.)*****MAP VIEWER*****

FLOW: 0.875 cfs SOURCE: Grassy Trail Creek
COUNTY: Carbon COMMON DESCRIPTION:

POINTS OF DIVERSION -- SURFACE:

(1) S 2824 ft W 1166 ft from N4 cor, Sec 07, T 14S, R 14E, SLBM
Diverting Works:
(2) S 1163 ft W 644 ft from NE cor, Sec 18, T 14S, R 14E, SLBM
Diverting Works:
(3) N 1521 ft W 1983 ft from SE cor, Sec 29, T 14S, R 14E, SLBM
Diverting Works:
(4) S 1013 ft E 125 ft from W4 cor, Sec 01, T 15S, R 13E, SLBM
Diverting Works:
(5) N 1604 ft E 1245 ft from SW cor, Sec 02, T 15S, R 13E, SLBM
Diverting Works:
(6) N 750 ft W 1345 ft from SE cor, Sec 03, T 15S, R 13E, SLBM
Diverting Works:
(7) S 566 ft E 4323 ft from NW cor, Sec 09, T 15S, R 13E, SLBM
Diverting Works:
(8) S 1149 ft E 1320 ft from NW cor, Sec 09, T 15S, R 13E, SLBM
Diverting Works:
(9) N 91 ft E 2390 ft from W4 cor, Sec 06, T 15S, R 14E, SLBM
Diverting Works:

Source:

Source:

Source:

Source:

Source:

Source:

Source:

Source:

Source:

Stream Alt Required?: No

USES OF WATER RIGHT***** ELU -- Equivalent Livestock Unit (cow, horse, etc.) ***** EDU -- Equivalent Domestic Unit or 1 Family

SUPPLEMENTAL GROUP NO.: 613926. Water Rights Appurtenant to the following use(s):

91-28(CERT), 84(CERT), 100(WUC), 114(WUC), 118(CERT)
125(WUC), 141(CERT), 158(CERT), 360(DEC), 361(DEC)
362(WUC), 363(DEC), 367(WUC), 368(WUC), 369(WUC)
372(DEC)

IRRIGATION: Sole Supply: UNEVALUATED acres Group Total: 66.5 Div Limit: 266.0 acft. PERIOD OF USE: 06/15 TO 09/15
Water User's Claim No. 100 is limited to the irrigation requirements of 6.54 acres.

###PLACE OF USE:	NORTH WEST QUARTER				NORTH EAST QUARTER				SOUTH WEST QUARTER				SOUTH EAST			
	NW	NE	SW	SE	NW	NE	SW	SE	NW	NE	SW	SE	NW	NE		
Sec 03 T 15S R 13E SLBM	*				*				*				*			
Sec 10 T 15S R 13E SLBM	*		30.0000		*		36.5000		*				*			

GROUP

SUPPLEMENTAL GROUP NO.: 613974. Water Rights Appurtenant to the following use(s):

91-28(CERT), 84(CERT), 114(WUC), 118(CERT), 125(WUC)
141(CERT), 158(CERT), 360(DEC), 361(DEC), 362(WUC)
363(DEC), 367(WUC), 368(WUC), 369(WUC), 372(DEC)

IRRIGATION: Sole Supply: UNEVALUATED acres Group Total: 932.4 Div Limit: 3729.6 acft. PERIOD OF USE: 04/01 TO 10/31

###PLACE OF USE:	NORTH WEST QUARTER				NORTH EAST QUARTER				SOUTH WEST QUARTER				SOUTH EAST			
	NW	NE	SW	SE	NW	NE	SW	SE	NW	NE	SW	SE	NW	NE		
Sec 24 T 15S R 12E SLBM	*				*		10.1000		*				*			
Sec 02 T 15S R 13E SLBM	*				*			6.6000	*				*			
Sec 03 T 15S R 13E SLBM	*				*				*		12.3000	14.0800	23.8300	34.2900		
Sec 07 T 15S R 13E SLBM	*				*				*				*	7.4000		
														38.3000		

GROUP

Sec 08 T 15S R 13E SLBM	*	39.6000		2.5000*20.9500		31.0000	11.9000*40.0000	40.0000	40.0000	40.0000	4.5500		3
Sec 10 T 15S R 13E SLBM	*	8.0000	0.2000	10.1000*	34.5000	3.2000							
Sec 11 T 15S R 13E SLBM	*	14.3000											
Sec 17 T 15S R 13E SLBM	*		40.0000										
Sec 18 T 15S R 13E SLBM	*		31.5000	8.9000*40.0000	40.0000		40.0000*	14.8000	7.7000	12.0000*			
Sec 19 T 15S R 13E SLBM	*	31.9000											
Sec 24 T 15S R 13E SLBM	*				10.1000		6.6000*						
Sec 06 T 15S R 14E SLBM	*						11.2800						

GROUP

SUPPLEMENTAL GROUP NO.: **613975**. Water Rights Appurtenant to the following use(s):

91-28(CERT), 37(CERT), 84(CERT), 114(WUC), 118(CERT),
 125(WUC), 141(CERT), 158(CERT), 360(DEC), 361(DEC),
 362(WUC), 363(DEC), 367(WUC), 368(WUC), 369(WUC),
 372(DEC)

IRRIGATION: Sole Supply: UNEVALUATED acres Group Total: 102.85 Div Limit: 411.4 acft. PERIOD OF USE: 04/01 TO 10/31

###PLACE OF USE:	*-----NORTH WEST QUARTER-----				*-----NORTH EAST QUARTER-----				*-----SOUTH WEST QUARTER-----				*-----SOUTH EAST	
	* NW	NE	SW	SE	* NW	NE	SW	SE	* NW	NE	SW	SE	* NW	NE
Sec 19 T 15S R 12E SLBM	*				*				*				*	
Sec 24 T 15S R 12E SLBM	*				*				*		12.1000		*	
Sec 25 T 15S R 12E SLBM	*				*		2.6500		*				*	3.7000
Sec 19 T 15S R 13E SLBM	*				*				*		12.1000		*	
Sec 30 T 15S R 13E SLBM	*	31.0000	22.2000	4.3000*					*	4.7000		6.2000*		

GROUP

SUPPLEMENTAL GROUP NO.: **613976**. Water Rights Appurtenant to the following use(s):

91-28(CERT), 84(CERT), 114(WUC), 118(CERT), 125(WUC),
 138(WUC), 141(CERT), 158(CERT), 360(DEC), 361(DEC),
 362(WUC), 363(DEC), 367(WUC), 368(WUC), 369(WUC),
 372(DEC)

IRRIGATION: Sole Supply: UNEVALUATED acres Group Total: 72.2 Div Limit: 288.8 acft. PERIOD OF USE: 04/01 TO 10/31

###PLACE OF USE:	*-----NORTH WEST QUARTER-----				*-----NORTH EAST QUARTER-----				*-----SOUTH WEST QUARTER-----				*-----SOUTH EAST	
	* NW	NE	SW	SE	* NW	NE	SW	SE	* NW	NE	SW	SE	* NW	NE
Sec 10 T 15S R 13E SLBM	*			19.0000*			30.2000	23.0000*						

GROUP

SUPPLEMENTAL GROUP NO.: **613977**. Water Rights Appurtenant to the following use(s):

91-28(CERT), 84(CERT), 114(WUC), 118(CERT), 125(WUC),
 141(CERT), 143(CERT), 145(CERT), 146(WUC), 158(CERT),
 159(CERT), 178(CERT), 360(DEC), 361(DEC), 362(WUC),
 363(DEC), 367(WUC), 368(WUC), 369(WUC), 372(DEC)

IRRIGATION: Sole Supply: UNEVALUATED acres Group Total: 15.63 Div Limit: 62.52 acft. PERIOD OF USE: 04/01 TO 10/31

###PLACE OF USE:	*-----NORTH WEST QUARTER-----				*-----NORTH EAST QUARTER-----				*-----SOUTH WEST QUARTER-----				*-----SOUTH EAST	
	* NW	NE	SW	SE	* NW	NE	SW	SE	* NW	NE	SW	SE	* NW	NE
Sec 17 T 15S R 14E SLBM	*				*				*	3.8000		5.8200		
Sec 18 T 15S R 14E SLBM	*				*				*		5.2100	0.8000*		

GROUP

SUPPLEMENTAL GROUP NO.: **613978**. Water Rights Appurtenant to the following use(s):

91-28(CERT), 84(CERT), 114(WUC), 118(CERT), 125(WUC),
 137(CERT), 141(CERT), 158(CERT), 360(DEC), 361(DEC),
 362(WUC), 363(DEC), 367(WUC), 368(WUC), 369(WUC),
 372(DEC)

IRRIGATION: Sole Supply: UNEVALUATED acres Group Total: 11.45 Div Limit: 45.8 acft. PERIOD OF USE: 04/01 TO 10/31

###PLACE OF USE:	*-----NORTH WEST QUARTER-----				*-----NORTH EAST QUARTER-----				*-----SOUTH WEST QUARTER-----				*-----SOUTH EAST	
	* NW	NE	SW	SE	* NW	NE	SW	SE	* NW	NE	SW	SE	* NW	NE
Sec 02 T 15S R 13E SLBM	*				*				*				*	11.4500

GROUP

SUPPLEMENTAL GROUP NO.: **613979**. Water Rights Appurtenant to the following use(s):

91-28(CERT), 84(CERT), 114(WUC), 118(CERT), 125(WUC),
 140(CERT), 141(CERT), 142(CERT), 143(CERT), 145(CERT),
 146(WUC), 158(CERT), 159(CERT), 178(CERT), 360(DEC),
 361(DEC), 362(WUC), 363(DEC), 367(WUC), 368(WUC),
 369(WUC), 372(DEC)

IRRIGATION: Sole Supply: UNEVALUATED acres Group Total: 149.02 Div Limit: 582.56 acft. PERIOD OF USE: 04/01 TO 10/31

###PLACE OF USE:	*-----NORTH WEST QUARTER-----				*-----NORTH EAST QUARTER-----				*-----SOUTH WEST QUARTER-----				*-----SOUTH EAST	
	* NW	NE	SW	SE	* NW	NE	SW	SE	* NW	NE	SW	SE	* NW	NE
Sec 01 T 15S R 13E SLBM	*				*				*	19.4100	26.3100	6.5600	15.9300*20.8800	8.6200
Sec 02 T 15S R 13E SLBM	*				*				*				*	126

GROUP

SUPPLEMENTAL GROUP NO.: **613980**. Water Rights Appurtenant to the following use(s):

91-19(CERT), 28(CERT), 84(CERT), 114(WUC), 118(CERT),
 120(CERT), 124(CERT), 125(WUC), 141(CERT), 143(CERT),
 145(CERT), 146(WUC), 158(CERT), 159(CERT), 178(CERT),
 360(DEC), 361(DEC), 362(WUC), 363(DEC), 367(WUC),
 368(WUC), 369(WUC), 372(DEC)

DOMESTIC: Sole Supply: UNEVALUATED EDUs Group Total: 105.0000 Div Limit: 76.44 acft. PERIOD OF USE: 01/01 TO 12/31
 Domestic uses in Columbia, Utah.

SUPPLEMENTAL GROUP NO.: **613981**. Water Rights Appurtenant to the following use(s):

91-28 (CERT), 84 (CERT), 114 (WUC), 118 (CERT), 125 (WUC),
 139 (CERT), 140 (CERT), 141 (CERT), 142 (CERT), 143 (CERT),
 145 (CERT), 146 (WUC), 158 (CERT), 159 (CERT), 178 (CERT),
 360 (DEC), 361 (DEC), 362 (WUC), 363 (DEC), 367 (WUC),
 368 (WUC), 369 (WUC), 372 (DEC)

DOMESTIC: Sole Supply: UNEVALUATED EDUs Group Total: 770.0000 Div Limit: 560.56 acft. PERIOD OF USE: 01/01 TO 12/31
 Flow for domestic is part of flow for irrigation. Domestic use at unincorporated areas at
 Sunnyside and East Carbon.

SUPPLEMENTAL GROUP NO.: **613983**. Water Rights Appurtenant to the following use(s):

91-19 (CERT), 28 (CERT), 84 (CERT), 99 (CERT), 114 (WUC),
 118 (CERT), 125 (WUC), 141 (CERT), 143 (CERT), 145 (CERT),
 146 (WUC), 158 (CERT), 159 (CERT), 178 (CERT), 332 (UGWC),
 360 (DEC), 361 (DEC), 362 (WUC), 363 (DEC), 367 (WUC),
 368 (WUC), 369 (WUC), 372 (DEC)

MINING: DISTRICT: Columbia NAME: Columbia PERIOD OF USE: 01/01 TO 12/31
 ORES: coal

Acre Feet Contributed by this Right for this Use: Unevaluated

SUPPLEMENTAL GROUP NO.: **613984**. Water Rights Appurtenant to the following use(s):

91-28 (CERT), 84 (CERT), 114 (WUC), 118 (CERT), 125 (WUC),
 141 (CERT), 143 (CERT), 145 (CERT), 158 (CERT), 159 (CERT),
 360 (DEC), 361 (DEC), 362 (WUC), 363 (DEC), 367 (WUC),
 368 (WUC), 369 (WUC), 372 (DEC)

MINING: DISTRICT: Sunnyside NAME: Sunnyside PERIOD OF USE: 01/01 TO 12/31
 ORES: coal

Acre Feet Contributed by this Right for this Use: Unevaluated

SUPPLEMENTAL GROUP NO.: **613985**. Water Rights Appurtenant to the following use(s):

91-28 (CERT), 84 (CERT), 114 (WUC), 118 (CERT), 125 (WUC),
 141 (CERT), 143 (CERT), 145 (CERT), 146 (WUC), 148 (CERT),
 149 (CERT), 150 (CERT), 158 (CERT), 159 (CERT), 178 (CERT),
 183 (CERT), 360 (DEC), 361 (DEC), 362 (WUC), 363 (DEC),
 367 (WUC), 368 (WUC), 369 (WUC), 372 (DEC)

MINING: DISTRICT: Columbia NAME: Horse Canyon PERIOD OF USE: 01/01 TO 12/31
 ORES: Coal

Acre Feet Contributed by this Right for this Use: Unevaluated

Administratively changed on Feb 14, 2007, by deleting the Domestic entry for 800 persons, and
 adding it to this Mining entry. The Mining was to employ and/or service the 800 persons.

INDUSTRIAL: In conjunction with the coal mining occurring at Horse Canyon. PERIOD OF USE: 01/01 TO 12/31
 Acre Feet Contributed by this Right for this Use: Unevaluated

SUPPLEMENTAL GROUP NO.: **614007**. Water Rights Appurtenant to the following use(s):

91-28 (CERT), 84 (CERT), 114 (WUC), 118 (CERT), 125 (WUC),
 141 (CERT), 146 (WUC), 158 (CERT), 360 (DEC), 361 (DEC),
 362 (WUC), 363 (DEC), 367 (WUC), 368 (WUC), 369 (WUC),
 372 (DEC)

IRRIGATION: Sole Supply: UNEVALUATED acres Group Total: 11.28 Div Limit: 45.12 acft. PERIOD OF USE: 04/01 TO 10/15

###PLACE OF USE:	NORTH WEST QUARTER				NORTH EAST QUARTER				SOUTH WEST QUARTER				SOUTH EAST			
	* NW	NE	SW	SE	* NW	NE	SW	SE	* NW	NE	SW	SE	* NW	NE		
Sec 06 T 15S R 14E SLBM	*				*				*	11.2800			*			

GROUP

SUPPLEMENTAL GROUP NO.: **614158**. Water Rights Appurtenant to the following use(s):

91-28 (CERT), 84 (CERT), 114 (WUC), 118 (CERT), 125 (WUC),
 141 (CERT), 143 (CERT), 144 (CERT), 145 (CERT), 146 (WUC),
 158 (CERT), 178 (CERT), 239 (APP), 360 (DEC), 361 (DEC),
 362 (WUC), 363 (DEC), 367 (WUC), 368 (WUC), 369 (WUC),
 372 (DEC)

MUNICIPAL: Sunnyside PERIOD OF USE: 01/01 TO 12/31
 Acre Feet Contributed by this Right for this Use: Unevaluated

SUPPLEMENTAL GROUP NO.: **614354**. Water Rights Appurtenant to the following use(s):

91-28 (CERT), 84 (CERT), 114 (WUC), 125 (WUC), 231 (CERT),
 362 (WUC), 367 (WUC), 368 (WUC), 369 (WUC)

IRRIGATION: Sole Supply: UNEVALUATED acres Group Total: 222.1 Div Limit: 0.0 acft. PERIOD OF USE: 04/01 TO 10/15
 WUC 91-231 is limited to the irrigation requirements of 160.0 acres.

INDUSTRIAL: Water uses related to coal mining. PERIOD OF USE: 01/01 TO 12/31
 Acre Feet Contributed by this Right for this Use: Unevaluated

###PLACE OF USE:	NORTH WEST QUARTER				NORTH EAST QUARTER				SOUTH WEST QUARTER				SOUTH EAST			
	* NW	NE	SW	SE	* NW	NE	SW	SE	* NW	NE	SW	SE	* NW	NE		
Sec 13 T 14S R 14E SLBM	*X				*X				*X				*X			
Sec 17 T 14S R 14E SLBM	*X				*X				*X				*X			
Sec 18 T 14S R 14E SLBM	*X				*X				*X				*X			
Sec 19 T 14S R 14E SLBM	*X				*X				*X				*X			
Sec 20 T 14S R 14E SLBM	*X				*X				*X				*X			
Sec 21 T 14S R 14E SLBM	*X				*X				*X				*X			
Sec 24 T 14S R 14E SLBM	*X				*X				*X				*X			
Sec 28 T 14S R 14E SLBM	*X				*X				*X				*X			
Sec 29 T 14S R 14E SLBM	*X				*X				*X				*X			

Sec 30 T 14S R 14E SLBM	*X	IX	IX	IX	*X	IX	IX	IX	*X	IX	IX	IX	*X	IX	IX
Sec 31 T 14S R 14E SLBM	*X	IX	IX	IX	*X	IX	IX	IX	*X	IX	IX	IX	*X	IX	IX
Sec 32 T 14S R 14E SLBM	*X	IX	IX	IX	*X	IX	IX	IX	*X	IX	IX	IX	*X	IX	IX
Sec 33 T 14S R 14E SLBM	*X	IX	IX	IX	*X	IX	IX	IX	*X	IX	IX	IX	*X	IX	IX
Sec 34 T 14S R 14E SLBM	*X	IX	IX	IX	*X	IX	IX	IX	*X	IX	IX	IX	*X	IX	IX
Sec 01 T 15S R 13E SLBM	*				*				2.3000*				*		
Sec 02 T 15S R 13E SLBM	* 3.5000	7.9000	20.5000	4.1000*									*		
Sec 03 T 15S R 13E SLBM	*			*									*		
Sec 10 T 15S R 13E SLBM	*	29.6000		3.6000*	11.7000	31.8000	1.1000						3.5000*		2
Sec 03 T 15S R 14E SLBM	*X	IX	IX	IX	*X	IX	IX	IX	*X	IX	IX	IX	*X	IX	IX
Sec 04 T 15S R 14E SLBM	*X	IX	IX	IX	*X	IX	IX	IX	*X	IX	IX	IX	*X	IX	IX
Sec 05 T 15S R 14E SLBM	* 4.4000			*					*				*		
Sec 06 T 15S R 14E SLBM	*		2.5000	14.3000*		0.2000	3.4000	7.2000*	12.2000	9.3000			3.7000*	24.2000	0.3000
															16
															GROUP

=====

This Right (91-367) has an evaluated sole-supply total for irrigation of 0.0000 acres.

=====

This Right (91-367) is a member of 15 supplemental water right groups with irrigated acreage totaling 1583.4300 acres.

=====

Storage from 01/01 to 12/31, inclusive, in Grassy Trail Reservoir with a maximum capacity of 916.000 acre-feet, located in:

Height of Dam:	89	NORTH-WEST¼	NORTH-EAST¼	SOUTH-WEST¼	SOUTH-EAST¼
Area Inundated:		NW NE SW SE	NW NE SW SE	NW NE SW SE	NW NE SW SE
Sec 01 T 14S R 14E SLBM	*	: : : *	* : : : *	* X: X: : *	* : : : *

Small Dam Required?: No

=====

OTHER COMMENTS*****

Also included in claim is George Christensen Decree 11/7/1917.
WUC 91-367 is limited to the annual diversion of 200.00 acre feet.

utah.gov Online Services Agency List Business

Search

Utah Division of Water Rights

Select Related Information

THIS RIGHT IS BEING PROTESTED IN A PROPOSED DETERMINATION BOOK!!!

(WARNING: Water Rights makes NO claims as to the accuracy of this data.) RUN DATE: 01/26/2011

WATER RIGHT: 91-368 APPLICATION/CLAIM NO.: CERT. NO.:
CHANGES: a3173 Certificate a522 (Issued:)
a4236 Certificate a522 (Issued:)

OWNERSHIP*****

NAME: East Carbon City (Public Water Supplier)
ADDR: 200 East Park Place
East Carbon UT 84520
INTEREST: 50% REMARKS:

NAME: Sunnyside City (Public Water Supplier)
ADDR: P.O. Box 69
Sunnyside UT 84539
INTEREST: 50% REMARKS:

DATES, ETC.*****

LAND OWNED BY APPLICANT? COUNTY TAX ID#:
FILED: PRIORITY: / 1888|PUB BEGAN: |PUB ENDED: |NEWSPAPER:
ProtestEnd: |PROTESTED: [No] |HEARNG HLD: |SE ACTION: [] |ActionDate: |PROOF DUE:
EXTENSION: |ELEC/PROOF: [] |ELEC/PROOF: |CERT/WUC: 10/28/1970|LAP, ETC: |LAPS LETTER:
RUSH LETTR: |RENOVATE: |RECON REQ: |TYPE: []
PD BOOK: [91-5] |MAP: [58c] |PUB DATE:
*TYPE -- DOCUMENT -- STATUS--

Type of Right: Decree Source of Info: Proposed Determination Status: Water User's Claim

LOCATION OF WATER RIGHT***(Points of Diversion: Click on Location to access PLAT Program.)*****MAP VIEWER*****

FLOW: 0.625 cfs SOURCE: Grassy Trail Creek
COUNTY: Carbon COMMON DESCRIPTION:

POINTS OF DIVERSION -- SURFACE:

(1) S 2824 ft W 1166 ft from N4 cor, Sec 07, T 14S, R 14E, SLBM	Source:
Diverting Works:	
(2) S 1163 ft W 644 ft from NE cor, Sec 18, T 14S, R 14E, SLBM	Source:
Diverting Works:	
(3) N 1521 ft W 1983 ft from SE cor, Sec 29, T 14S, R 14E, SLBM	Source:
Diverting Works:	
(4) S 1013 ft E 125 ft from W4 cor, Sec 01, T 15S, R 13E, SLBM	Source:
Diverting Works:	
(5) N 1604 ft E 1245 ft from SW cor, Sec 02, T 15S, R 13E, SLBM	Source:
Diverting Works:	
(6) N 750 ft W 1345 ft from SE cor, Sec 03, T 15S, R 13E, SLBM	Source:
Diverting Works:	
(7) S 566 ft E 4323 ft from NW cor, Sec 09, T 15S, R 13E, SLBM	Source:
Diverting Works:	
(8) S 1149 ft E 1320 ft from NW cor, Sec 09, T 15S, R 13E, SLBM	Source:
Diverting Works:	
(9) N 91 ft E 2390 ft from W4 cor, Sec 06, T 15S, R 14E, SLBM	Source:
Diverting Works:	

Stream Alt Required?: No

USES OF WATER RIGHT***** ELU -- Equivalent Livestock Unit (cow, horse, etc.) ***** EDU -- Equivalent Domestic Unit or 1 Family

SUPPLEMENTAL GROUP NO.: 613926. Water Rights Appurtenant to the following use(s):

91-28(CERT), 84(CERT), 100(WUC), 114(WUC), 118(CERT)
125(WUC), 141(CERT), 158(CERT), 360(DEC), 361(DEC)
362(WUC), 363(DEC), 367(WUC), 368(WUC), 369(WUC)
372(DEC)

IRRIGATION: Sole Supply: UNEVALUATED acres Group Total: 66.5 Div Limit: 266.0 acft. PERIOD OF USE: 06/15 TO 09/15
Water User's Claim No. 100 is limited to the irrigation requirements of 6.54 acres.

###PLACE OF USE:	*-----NORTH WEST QUARTER-----	*-----NORTH EAST QUARTER-----	*-----SOUTH WEST QUARTER-----	*-----SOUTH EAST
	* NW NE SW SE	* NW NE SW SE	* NW NE SW SE	* NW NE
Sec 03 T 15S R 13E SLBM	*	*	*	*
Sec 10 T 15S R 13E SLBM	* 30.0000	* 36.5000	*	*

GROUP

SUPPLEMENTAL GROUP NO.: 613974. Water Rights Appurtenant to the following use(s):

91-28(CERT), 84(CERT), 114(WUC), 118(CERT), 125(WUC)
141(CERT), 158(CERT), 360(DEC), 361(DEC), 362(WUC)
363(DEC), 367(WUC), 368(WUC), 369(WUC), 372(DEC)

IRRIGATION: Sole Supply: UNEVALUATED acres Group Total: 932.4 Div Limit: 3729.6 acft. PERIOD OF USE: 04/01 TO 10/31

###PLACE OF USE:	*-----NORTH WEST QUARTER-----	*-----NORTH EAST QUARTER-----	*-----SOUTH WEST QUARTER-----	*-----SOUTH EAST
------------------	-------------------------------	-------------------------------	-------------------------------	------------------

	* NW	NE	SW	SE	* NW	NE	SW	SE	* NW	NE	SW	SE	* NW	NE	
Sec 24 T 15S R 12E SLBM	*				*	10.1000			6.6000*						
Sec 02 T 15S R 13E SLBM	*				*					12.3000	14.0800	23.8300	34.2900	21.9500	
Sec 03 T 15S R 13E SLBM	*				*										
Sec 07 T 15S R 13E SLBM	*				*										7.4000
Sec 08 T 15S R 13E SLBM	*	39.6000		2.5000	20.9500									38.3000	39.5000
Sec 10 T 15S R 13E SLBM	* 8.0000		0.2000	10.1000*		34.5000	31.0000	11.9000	40.0000	40.0000	40.0000	40.0000	40.0000	4.5500	3
Sec 11 T 15S R 13E SLBM	* 14.3000						3.2000								
Sec 17 T 15S R 13E SLBM	*		40.0000		*										
Sec 18 T 15S R 13E SLBM	*		31.5000	8.9000	40.0000	40.0000		40.0000		14.8000	7.7000	12.0000			
Sec 19 T 15S R 13E SLBM	* 31.9000				*										
Sec 24 T 15S R 13E SLBM	*				*	10.1000		6.6000*							
Sec 06 T 15S R 14E SLBM	*				*				11.2800						

GROUP

SUPPLEMENTAL GROUP NO.: **613975**. Water Rights Appurtenant to the following use(s):
 91-28(CERT), 37(CERT), 84(CERT), 114(WUC), 118(CERT),
 125(WUC), 141(CERT), 158(CERT), 360(DEC), 361(DEC),
 362(WUC), 363(DEC), 367(WUC), 368(WUC), 369(WUC),
 372(DEC)

IRRIGATION: Sole Supply: UNEVALUATED acres Group Total: 102.85 Div Limit: 411.4 acft. PERIOD OF USE: 04/01 TO 10/31

###PLACE OF USE:	*-----NORTH WEST QUARTER-----				*-----NORTH EAST QUARTER-----				*-----SOUTH WEST QUARTER-----				*-----SOUTH EAST	
	* NW	NE	SW	SE	* NW	NE	SW	SE	* NW	NE	SW	SE	* NW	NE
Sec 19 T 15S R 12E SLBM	*				*				*			12.1000	*	
Sec 24 T 15S R 12E SLBM	*				*				*				*	3.7000
Sec 25 T 15S R 12E SLBM	*				*	2.6500			*				*	
Sec 19 T 15S R 13E SLBM	*				*				*		12.1000		*	
Sec 30 T 15S R 13E SLBM	* 31.0000		22.2000	4.3000*					* 4.7000			6.2000*		

GROUP

SUPPLEMENTAL GROUP NO.: **613976**. Water Rights Appurtenant to the following use(s):
 91-28(CERT), 84(CERT), 114(WUC), 118(CERT), 125(WUC),
 138(WUC), 141(CERT), 158(CERT), 360(DEC), 361(DEC),
 362(WUC), 363(DEC), 367(WUC), 368(WUC), 369(WUC),
 372(DEC)

IRRIGATION: Sole Supply: UNEVALUATED acres Group Total: 72.2 Div Limit: 288.8 acft. PERIOD OF USE: 04/01 TO 10/31

###PLACE OF USE:	*-----NORTH WEST QUARTER-----				*-----NORTH EAST QUARTER-----				*-----SOUTH WEST QUARTER-----				*-----SOUTH EAST	
	* NW	NE	SW	SE	* NW	NE	SW	SE	* NW	NE	SW	SE	* NW	NE
Sec 10 T 15S R 13E SLBM	*			19.0000*			30.2000	23.0000*						

GROUP

SUPPLEMENTAL GROUP NO.: **613977**. Water Rights Appurtenant to the following use(s):
 91-28(CERT), 84(CERT), 114(WUC), 118(CERT), 125(WUC),
 141(CERT), 143(CERT), 145(CERT), 146(WUC), 158(CERT),
 159(CERT), 178(CERT), 360(DEC), 361(DEC), 362(WUC),
 363(DEC), 367(WUC), 368(WUC), 369(WUC), 372(DEC)

IRRIGATION: Sole Supply: UNEVALUATED acres Group Total: 15.63 Div Limit: 62.52 acft. PERIOD OF USE: 04/01 TO 10/31

###PLACE OF USE:	*-----NORTH WEST QUARTER-----				*-----NORTH EAST QUARTER-----				*-----SOUTH WEST QUARTER-----				*-----SOUTH EAST	
	* NW	NE	SW	SE	* NW	NE	SW	SE	* NW	NE	SW	SE	* NW	NE
Sec 17 T 15S R 14E SLBM	*				*				* 3.8000			5.8200	*	
Sec 18 T 15S R 14E SLBM	*				*					5.2100		0.8000*		

GROUP

SUPPLEMENTAL GROUP NO.: **613978**. Water Rights Appurtenant to the following use(s):
 91-28(CERT), 84(CERT), 114(WUC), 118(CERT), 125(WUC),
 137(CERT), 141(CERT), 158(CERT), 360(DEC), 361(DEC),
 362(WUC), 363(DEC), 367(WUC), 368(WUC), 369(WUC),
 372(DEC)

IRRIGATION: Sole Supply: UNEVALUATED acres Group Total: 11.45 Div Limit: 45.8 acft. PERIOD OF USE: 04/01 TO 10/31

###PLACE OF USE:	*-----NORTH WEST QUARTER-----				*-----NORTH EAST QUARTER-----				*-----SOUTH WEST QUARTER-----				*-----SOUTH EAST	
	* NW	NE	SW	SE	* NW	NE	SW	SE	* NW	NE	SW	SE	* NW	NE
Sec 02 T 15S R 13E SLBM	*				*				*				*	11.4500

GROUP

SUPPLEMENTAL GROUP NO.: **613979**. Water Rights Appurtenant to the following use(s):
 91-28(CERT), 84(CERT), 114(WUC), 118(CERT), 125(WUC),
 140(CERT), 141(CERT), 142(CERT), 143(CERT), 145(CERT),
 146(WUC), 158(CERT), 159(CERT), 178(CERT), 360(DEC),
 361(DEC), 362(WUC), 363(DEC), 367(WUC), 368(WUC),
 369(WUC), 372(DEC)

IRRIGATION: Sole Supply: UNEVALUATED acres Group Total: 149.02 Div Limit: 582.56 acft. PERIOD OF USE: 04/01 TO 10/31

###PLACE OF USE:	*-----NORTH WEST QUARTER-----				*-----NORTH EAST QUARTER-----				*-----SOUTH WEST QUARTER-----				*-----SOUTH EAST	
	* NW	NE	SW	SE	* NW	NE	SW	SE	* NW	NE	SW	SE	* NW	NE
Sec 01 T 15S R 13E SLBM	*				*				* 19.4100	26.3100	6.5600	15.9300	20.8800	8.6200
Sec 02 T 15S R 13E SLBM	*				*				*				*	

GROUP

SUPPLEMENTAL GROUP NO.: **613980**. Water Rights Appurtenant to the following use(s):
 91-19(CERT), 28(CERT), 84(CERT), 114(WUC), 118(CERT),
 120(CERT), 124(CERT), 125(WUC), 141(CERT), 143(CERT),
 145(CERT), 146(WUC), 158(CERT), 159(CERT), 178(CERT),
 360(DEC), 361(DEC), 362(WUC), 363(DEC), 367(WUC),
 368(WUC), 369(WUC), 372(DEC)

DOMESTIC: Sole Supply: UNEVALUATED EDUS Group Total: 105.0000 Div Limit: 76.44 acft. PERIOD OF USE: 01/01 TO 12/31
Domestic uses in Columbia, Utah.

SUPPLEMENTAL GROUP NO.: **613981**. Water Rights Appurtenant to the following use(s):
91-28(CERT), 84(CERT), 114(WUC), 118(CERT), 125(WUC)
139(CERT), 140(CERT), 141(CERT), 142(CERT), 143(CERT)
145(CERT), 146(WUC), 158(CERT), 159(CERT), 178(CERT)
360(DEC), 361(DEC), 362(WUC), 363(DEC), 367(WUC)
368(WUC), 369(WUC), 372(DEC)

DOMESTIC: Sole Supply: UNEVALUATED EDUS Group Total: 770.0000 Div Limit: 560.56 acft. PERIOD OF USE: 01/01 TO 12/31
Flow for domestic is part of flow for irrigation. Domestic use at unincorporated areas at Sunnyside and East Carbon.

SUPPLEMENTAL GROUP NO.: **613983**. Water Rights Appurtenant to the following use(s):
91-19(CERT), 28(CERT), 84(CERT), 99(CERT), 114(WUC)
118(CERT), 125(WUC), 141(CERT), 143(CERT), 145(CERT)
146(WUC), 158(CERT), 159(CERT), 178(CERT), 332(UGWC)
360(DEC), 361(DEC), 362(WUC), 363(DEC), 367(WUC)
368(WUC), 369(WUC), 372(DEC)

MINING: DISTRICT: Columbia NAME: Columbia PERIOD OF USE: 01/01 TO 12/31
ORES: coal
Acre Feet Contributed by this Right for this Use: Unevaluated

SUPPLEMENTAL GROUP NO.: **613984**. Water Rights Appurtenant to the following use(s):
91-28(CERT), 84(CERT), 114(WUC), 118(CERT), 125(WUC)
141(CERT), 143(CERT), 145(CERT), 158(CERT), 159(CERT)
360(DEC), 361(DEC), 362(WUC), 363(DEC), 367(WUC)
368(WUC), 369(WUC), 372(DEC)

MINING: DISTRICT: Sunnyside NAME: Sunnyside PERIOD OF USE: 01/01 TO 12/31
ORES: coal
Acre Feet Contributed by this Right for this Use: Unevaluated

SUPPLEMENTAL GROUP NO.: **613985**. Water Rights Appurtenant to the following use(s):
91-28(CERT), 84(CERT), 114(WUC), 118(CERT), 125(WUC)
141(CERT), 143(CERT), 145(CERT), 146(WUC), 148(CERT)
149(CERT), 150(CERT), 158(CERT), 159(CERT), 178(CERT)
183(CERT), 360(DEC), 361(DEC), 362(WUC), 363(DEC)
367(WUC), 368(WUC), 369(WUC), 372(DEC)

MINING: DISTRICT: Columbia NAME: Horse Canyon PERIOD OF USE: 01/01 TO 12/31
ORES: Coal
Acre Feet Contributed by this Right for this Use: Unevaluated

Administratively changed on Feb 14, 2007, by deleting the Domestic entry for 800 persons, and adding it to this Mining entry. The Mining was to employ and/or service the 800 persons.

INDUSTRIAL: In conjunction with the coal mining occurring at Horse Canyon. PERIOD OF USE: 01/01 TO 12/31
Acre Feet Contributed by this Right for this Use: Unevaluated

SUPPLEMENTAL GROUP NO.: **614007**. Water Rights Appurtenant to the following use(s):
91-28(CERT), 84(CERT), 114(WUC), 118(CERT), 125(WUC)
141(CERT), 146(WUC), 158(CERT), 360(DEC), 361(DEC)
362(WUC), 363(DEC), 367(WUC), 368(WUC), 369(WUC)
372(DEC)

IRRIGATION: Sole Supply: UNEVALUATED acres Group Total: 11.28 Div Limit: 45.12 acft. PERIOD OF USE: 04/01 TO 10/15

###PLACE OF USE:	NORTH WEST QUARTER				NORTH EAST QUARTER				SOUTH WEST QUARTER				SOUTH EAST				
	NW	NE	SW	SE	NW	NE	SW	SE	NW	NE	SW	SE	NW	NE	SW	SE	
Sec 06 T 15S R 14E SLBM	*				*					*				*			

GROUP

SUPPLEMENTAL GROUP NO.: **614158**. Water Rights Appurtenant to the following use(s):
91-28(CERT), 84(CERT), 114(WUC), 118(CERT), 125(WUC)
141(CERT), 143(CERT), 144(CERT), 145(CERT), 146(WUC)
158(CERT), 178(CERT), 239(APP), 360(DEC), 361(DEC)
362(WUC), 363(DEC), 367(WUC), 368(WUC), 369(WUC)
372(DEC)

MUNICIPAL: Sunnyside PERIOD OF USE: 01/01 TO 12/31
Acre Feet Contributed by this Right for this Use: Unevaluated

SUPPLEMENTAL GROUP NO.: **614354**. Water Rights Appurtenant to the following use(s):
91-28(CERT), 84(CERT), 114(WUC), 125(WUC), 231(CERT)
362(WUC), 367(WUC), 368(WUC), 369(WUC)

IRRIGATION: Sole Supply: UNEVALUATED acres Group Total: 222.1 Div Limit: 0.0 acft. PERIOD OF USE: 04/01 TO 10/15
WUC 91-231 is limited to the irrigation requirements of 160.0 acres.

INDUSTRIAL: Water uses related to coal mining. PERIOD OF USE: 01/01 TO 12/31
Acre Feet Contributed by this Right for this Use: Unevaluated

###PLACE OF USE:	NORTH WEST QUARTER				NORTH EAST QUARTER				SOUTH WEST QUARTER				SOUTH EAST				
	NW	NE	SW	SE	NW	NE	SW	SE	NW	NE	SW	SE	NW	NE	SW	SE	
Sec 13 T 14S R 14E SLBM	*X				*X					*X				*X			
Sec 17 T 14S R 14E SLBM	*X				*X					*X				*X			
Sec 18 T 14S R 14E SLBM	*X				*X					*X				*X			
Sec 19 T 14S R 14E SLBM	*X				*X					*X				*X			

Sec 20 T 14S R 14E SLBM	*X	IX	IX	IX	*X	IX	IX	IX	*X	IX	IX	IX	*X	IX	IX
Sec 21 T 14S R 14E SLBM	*X	IX	IX	IX	*X	IX	IX	IX	*X	IX	IX	IX	*X	IX	IX
Sec 24 T 14S R 14E SLBM	*X	IX	IX	IX	*X	IX	IX	IX	*X	IX	IX	IX	*X	IX	IX
Sec 28 T 14S R 14E SLBM	*X	IX	IX	IX	*X	IX	IX	IX	*X	IX	IX	IX	*X	IX	IX
Sec 29 T 14S R 14E SLBM	*X	IX	IX	IX	*X	IX	IX	IX	*X	IX	IX	IX	*X	IX	IX
Sec 30 T 14S R 14E SLBM	*X	IX	IX	IX	*X	IX	IX	IX	*X	IX	IX	IX	*X	IX	IX
Sec 31 T 14S R 14E SLBM	*X	IX	IX	IX	*X	IX	IX	IX	*X	IX	IX	IX	*X	IX	IX
Sec 32 T 14S R 14E SLBM	*X	IX	IX	IX	*X	IX	IX	IX	*X	IX	IX	IX	*X	IX	IX
Sec 33 T 14S R 14E SLBM	*X	IX	IX	IX	*X	IX	IX	IX	*X	IX	IX	IX	*X	IX	IX
Sec 34 T 14S R 14E SLBM	*X	IX	IX	IX	*X	IX	IX	IX	*X	IX	IX	IX	*X	IX	IX
Sec 01 T 15S R 13E SLBM	*				*				2.3000*				*		
Sec 02 T 15S R 13E SLBM	* 3.5000	7.9000	20.5000	4.1000*					*				*		
Sec 03 T 15S R 13E SLBM	*			*					*				*		
Sec 10 T 15S R 13E SLBM	*	29.6000		3.6000*11.7000	31.8000	1.1000			*				3.5000*		2
Sec 03 T 15S R 14E SLBM	*X	IX	IX	IX	*X	IX	IX	IX	*X	IX	IX	IX	*X	IX	IX
Sec 04 T 15S R 14E SLBM	*X	IX	IX	IX	*X	IX	IX	IX	*X	IX	IX	IX	*X	IX	IX
Sec 05 T 15S R 14E SLBM	* 4.4000			*					*				*		
Sec 06 T 15S R 14E SLBM	*		2.5000	14.3000*		0.2000	3.4000	7.2000*12.2000	9.3000				3.7000*24.2000	0.3000	16

GROUP

=====

This Right (91-368) has an evaluated sole-supply total for irrigation of 0.0000 acres.

=====

This Right (91-368) is a member of 15 supplemental water right groups with irrigated acreage totaling 1583.4300 acres.

=====

Storage from 01/01 to 12/31, inclusive, in Grassy Trail Reservoir with a maximum capacity of 916.000 acre-feet, located in:

Height of Dam:	89	NORTH-WEST¼	NORTH-EAST¼	SOUTH-WEST¼	SOUTH-EAST¼
Area Inundated:		NW NE SW SE	NW NE SW SE	NW NE SW SE	NW NE SW SE
Sec 07 T 14S R 14E SLBM	* X: X: X: X*	* : : : *	* X: X: : *	* : : : *	

Small Dam Required?: No

=====

OTHER COMMENTS*****

=====

Also included in claim is George Christensen Decree, 11/7/1917.

WUC 91-368 is limited to annual diversion of 150 acre feet of water.

*****E N D O F D A T A*****

=====

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Utah Division of Water Rights

Select Related Information

THIS RIGHT IS BEING PROTESTED IN A PROPOSED DETERMINATION BOOK!!!

(WARNING: Water Rights makes NO claims as to the accuracy of this data.) RUN DATE: 01/26/2011

WATER RIGHT: **91-369** APPLICATION/CLAIM NO.: CERT. NO.:
 CHANGES: a3174 Certificate a520 (Issued:)
a4232 Certificate a520 (Issued:)

OWNERSHIP*****

NAME: East Carbon City (Public Water Supplier)
 ADDR: 300 East Park Place
 East Carbon UT 84520
 INTEREST: 50% REMARKS:

NAME: Sunnyside City (Public Water Supplier)
 ADDR: P.O. Box 69
 Sunnyside UT 84539
 INTEREST: 50% REMARKS:

DATES, ETC.*****

LAND OWNED BY APPLICANT? COUNTY TAX ID#:
 FILED: PRIORITY: / /1888|PUB BEGAN: |PUB ENDED: |NEWSPAPER:
 ProtestEnd: |PROTESTED: [No] |HEARNG HLD: |SE ACTION: []|ActionDate: |PROOF DUE:
 EXTENSION: |ELEC/PROOF: []|ELEC/PROOF: |CERT/WUC: 10/28/1970|LAP, ETC: |LAPS LETTER:
 RUSH LETTR: |RENOVATE: []|RECON REQ: |TYPE: []
 PD BOOK: [91-5] |IMAP: [58c] |PUB DATE:
 *TYPE -- DOCUMENT -- STATUS-----

Type of Right: Decree Source of Info: Proposed Determination Status: Water User's Claim

LOCATION OF WATER RIGHT*** (Points of Diversion: Click on Location to access PLAT Program.)*******MAP VIEWER*******

FLOW: 0.25 cfs SOURCE: Grassy Trail Creek
 COUNTY: Carbon COMMON DESCRIPTION:

POINTS OF DIVERSION -- SURFACE:

- (1) S 2824 ft W 1166 ft from N4 cor, Sec 07, T 14S, R 14E, SLBM
 Diverting Works:
- (2) S 1163 ft W 644 ft from NE cor, Sec 18, T 14S, R 14E, SLBM
 Diverting Works:
- (3) N 1521 ft W 1983 ft from SE cor, Sec 29, T 14S, R 14E, SLBM
 Diverting Works:
- (4) S 1013 ft E 125 ft from W4 cor, Sec 01, T 15S, R 13E, SLBM
 Diverting Works:
- (5) N 1604 ft E 1245 ft from SW cor, Sec 02, T 15S, R 13E, SLBM
 Diverting Works:
- (6) N 750 ft W 1345 ft from SE cor, Sec 03, T 15S, R 13E, SLBM
 Diverting Works:
- (7) S 566 ft E 4323 ft from NW cor, Sec 09, T 15S, R 13E, SLBM
 Diverting Works:
- (8) S 1149 ft E 1320 ft from NW cor, Sec 09, T 15S, R 13E, SLBM
 Diverting Works:
- (9) N 91 ft E 2390 ft from W4 cor, Sec 06, T 15S, R 14E, SLBM
 Diverting Works:

Source:

Source:

Source:

Source:

Source:

Source:

Source:

Source:

Source:

Stream Alt Required?: No

USES OF WATER RIGHT***** ELU -- Equivalent Livestock Unit (cow, horse, etc.) ***** EDU -- Equivalent Domestic Unit or 1 Family

SUPPLEMENTAL GROUP NO.: **613926**. Water Rights Appurtenant to the following use(s):

91-28(CERT), 84(CERT), 100(WUC), 114(WUC), 118(CERT)
 125(WUC), 141(CERT), 158(CERT), 360(DEC), 361(DEC)
 362(WUC), 363(DEC), 367(WUC), 368(WUC), 369(WUC)
 372(DEC)

IRRIGATION: Sole Supply: UNEVALUATED acres Group Total: 66.5 Div Limit: 266.0 acft. PERIOD OF USE: 06/15 TO 09/15
 Water User's Claim No. 100 is limited to the irrigation requirements of 6.54 acres.

###PLACE OF USE:	*-----NORTH WEST QUARTER-----				*-----NORTH EAST QUARTER-----				*-----SOUTH WEST QUARTER-----				*-----SOUTH EAST			
	* NW	* NE	* SW	* SE	* NW	* NE	* SW	* SE	* NW	* NE	* SW	* SE	* NW	* NE		
Sec 03 T 15S R 13E SLBM	*				*				*				*			
Sec 10 T 15S R 13E SLBM	*		30.0000		*		36.5000		*				*			

GROUP

SUPPLEMENTAL GROUP NO.: **613974**. Water Rights Appurtenant to the following use(s):

91-28(CERT), 84(CERT), 114(WUC), 118(CERT), 125(WUC)
 141(CERT), 158(CERT), 360(DEC), 361(DEC), 362(WUC)
 363(DEC), 367(WUC), 368(WUC), 369(WUC), 372(DEC)

IRRIGATION: Sole Supply: UNEVALUATED acres Group Total: 932.4 Div Limit: 3729.6 acft. PERIOD OF USE: 04/01 TO 10/31

###PLACE OF USE:	*-----NORTH WEST QUARTER-----	*-----NORTH EAST QUARTER-----	*-----SOUTH WEST QUARTER-----	*-----SOUTH EAST

	* NW	NE	SW	SE	* NW	NE	SW	SE	* NW	NE	SW	SE	* NW	NE	
Sec 24 T 15S R 12E SLBM	*				*		10.1000		6.6000*						
Sec 02 T 15S R 13E SLBM	*				*					12.3000	14.0800	23.8300	34.2900	21.9500	
Sec 03 T 15S R 13E SLBM	*				*										
Sec 07 T 15S R 13E SLBM	*				*										7.4000
Sec 08 T 15S R 13E SLBM	*	39.6000		2.5000	20.9500			31.0000	11.9000	40.0000	40.0000	40.0000	40.0000	38.3000	39.5000
Sec 10 T 15S R 13E SLBM	*	8.0000		0.2000	10.1000		34.5000	3.2000						4.5500	
Sec 11 T 15S R 13E SLBM	*	14.3000													
Sec 17 T 15S R 13E SLBM	*			40.0000											
Sec 18 T 15S R 13E SLBM	*		31.5000	8.9000	40.0000	40.0000		40.0000		14.8000	7.7000	12.0000			
Sec 19 T 15S R 13E SLBM	*	31.9000													
Sec 24 T 15S R 13E SLBM	*					10.1000		6.6000*							
Sec 06 T 15S R 14E SLBM	*								11.2800						

GROUP

SUPPLEMENTAL GROUP NO.: **613975**. Water Rights Appurtenant to the following use(s):
 91-28(CERT), 37(CERT), 84(CERT), 114(WUC), 118(CERT)
 125(WUC), 141(CERT), 158(CERT), 360(DEC), 361(DEC),
 362(WUC), 363(DEC), 367(WUC), 368(WUC), 369(WUC)
 372(DEC)

IRRIGATION: Sole Supply: UNEVALUATED acres Group Total: 102.85 Div Limit: 411.4 acft. PERIOD OF USE: 04/01 TO 10/31

###PLACE OF USE:	*-----NORTH WEST QUARTER-----				*-----NORTH EAST QUARTER-----				*-----SOUTH WEST QUARTER-----				*-----SOUTH EAST QUARTER-----			
	* NW	NE	SW	SE	* NW	NE	SW	SE	* NW	NE	SW	SE	* NW	NE		
Sec 19 T 15S R 12E SLBM	*				*				*		12.1000		*			
Sec 24 T 15S R 12E SLBM	*				*				*				*		3.7000	
Sec 25 T 15S R 12E SLBM	*				*	2.6500			*				*			
Sec 19 T 15S R 13E SLBM	*				*				*		12.1000		*			
Sec 30 T 15S R 13E SLBM	*	31.0000		22.2000	4.3000				*	4.7000			6.2000			

GROUP

SUPPLEMENTAL GROUP NO.: **613976**. Water Rights Appurtenant to the following use(s):
 91-28(CERT), 84(CERT), 114(WUC), 118(CERT), 125(WUC)
 138(WUC), 141(CERT), 158(CERT), 360(DEC), 361(DEC)
 362(WUC), 363(DEC), 367(WUC), 368(WUC), 369(WUC)
 372(DEC)

IRRIGATION: Sole Supply: UNEVALUATED acres Group Total: 72.2 Div Limit: 288.8 acft. PERIOD OF USE: 04/01 TO 10/31

###PLACE OF USE:	*-----NORTH WEST QUARTER-----				*-----NORTH EAST QUARTER-----				*-----SOUTH WEST QUARTER-----				*-----SOUTH EAST QUARTER-----			
	* NW	NE	SW	SE	* NW	NE	SW	SE	* NW	NE	SW	SE	* NW	NE		
Sec 10 T 15S R 13E SLBM	*			19.0000	*			30.2000	23.0000	*			*			

GROUP

SUPPLEMENTAL GROUP NO.: **613977**. Water Rights Appurtenant to the following use(s):
 91-28(CERT), 84(CERT), 114(WUC), 118(CERT), 125(WUC)
 141(CERT), 143(CERT), 145(CERT), 146(WUC), 158(CERT)
 159(CERT), 178(CERT), 360(DEC), 361(DEC), 362(WUC)
 363(DEC), 367(WUC), 368(WUC), 369(WUC), 372(DEC)

IRRIGATION: Sole Supply: UNEVALUATED acres Group Total: 15.63 Div Limit: 62.52 acft. PERIOD OF USE: 04/01 TO 10/31

###PLACE OF USE:	*-----NORTH WEST QUARTER-----				*-----NORTH EAST QUARTER-----				*-----SOUTH WEST QUARTER-----				*-----SOUTH EAST QUARTER-----			
	* NW	NE	SW	SE	* NW	NE	SW	SE	* NW	NE	SW	SE	* NW	NE		
Sec 17 T 15S R 14E SLBM	*				*				3.8000		5.8200		*			
Sec 18 T 15S R 14E SLBM	*				*					5.2100		0.8000	*			

GROUP

SUPPLEMENTAL GROUP NO.: **613978**. Water Rights Appurtenant to the following use(s):
 91-28(CERT), 84(CERT), 114(WUC), 118(CERT), 125(WUC)
 137(CERT), 141(CERT), 158(CERT), 360(DEC), 361(DEC)
 362(WUC), 363(DEC), 367(WUC), 368(WUC), 369(WUC)
 372(DEC)

IRRIGATION: Sole Supply: UNEVALUATED acres Group Total: 11.45 Div Limit: 45.8 acft. PERIOD OF USE: 04/01 TO 10/31

###PLACE OF USE:	*-----NORTH WEST QUARTER-----				*-----NORTH EAST QUARTER-----				*-----SOUTH WEST QUARTER-----				*-----SOUTH EAST QUARTER-----			
	* NW	NE	SW	SE	* NW	NE	SW	SE	* NW	NE	SW	SE	* NW	NE		
Sec 02 T 15S R 13E SLBM	*				*				*				*		11.4500	

GROUP

SUPPLEMENTAL GROUP NO.: **613979**. Water Rights Appurtenant to the following use(s):
 91-28(CERT), 84(CERT), 114(WUC), 118(CERT), 125(WUC)
 140(CERT), 141(CERT), 142(CERT), 143(CERT), 145(CERT)
 146(WUC), 158(CERT), 159(CERT), 178(CERT), 360(DEC)
 361(DEC), 362(WUC), 363(DEC), 367(WUC), 368(WUC)
 369(WUC), 372(DEC)

IRRIGATION: Sole Supply: UNEVALUATED acres Group Total: 149.02 Div Limit: 582.56 acft. PERIOD OF USE: 04/01 TO 10/31

###PLACE OF USE:	*-----NORTH WEST QUARTER-----				*-----NORTH EAST QUARTER-----				*-----SOUTH WEST QUARTER-----				*-----SOUTH EAST QUARTER-----			
	* NW	NE	SW	SE	* NW	NE	SW	SE	* NW	NE	SW	SE	* NW	NE		
Sec 01 T 15S R 13E SLBM	*				*				19.4100	26.3100	6.5600	15.9300	20.8800	8.6200	8	
Sec 02 T 15S R 13E SLBM	*				*								*			126

GROUP

SUPPLEMENTAL GROUP NO.: **613980**. Water Rights Appurtenant to the following use(s):
 91-19(CERT), 28(CERT), 84(CERT), 114(WUC), 118(CERT)
 120(CERT), 124(CERT), 125(WUC), 141(CERT), 143(CERT)
 145(CERT), 146(WUC), 158(CERT), 159(CERT), 178(CERT)
 360(DEC), 361(DEC), 362(WUC), 363(DEC), 367(WUC)
 368(WUC), 369(WUC), 372(DEC)

DOMESTIC: Sole Supply: UNEVALUATED EDUs Group Total: 105.0000 Div Limit: 76.44 acft. PERIOD OF USE: 01/01 TO 12/31
Domestic uses in Columbia, Utah.

SUPPLEMENTAL GROUP NO.: **613981**. Water Rights Appurtenant to the following use(s):
91-28(CERT), 84(CERT), 114(WUC), 118(CERT), 125(WUC)
139(CERT), 140(CERT), 141(CERT), 142(CERT), 143(CERT)
145(CERT), 146(WUC), 158(CERT), 159(CERT), 178(CERT)
360(DEC), 361(DEC), 362(WUC), 363(DEC), 367(WUC)
368(WUC), 369(WUC), 372(DEC)

DOMESTIC: Sole Supply: UNEVALUATED EDUs Group Total: 770.0000 Div Limit: 560.56 acft. PERIOD OF USE: 01/01 TO 12/31
Flow for domestic is part of flow for irrigation. Domestic use at unincorporated areas at Sunnyside and East Carbon.

SUPPLEMENTAL GROUP NO.: **613983**. Water Rights Appurtenant to the following use(s):
91-19(CERT), 28(CERT), 84(CERT), 99(CERT), 114(WUC)
118(CERT), 125(WUC), 141(CERT), 143(CERT), 145(CERT)
146(WUC), 158(CERT), 159(CERT), 178(CERT), 332(UGWC)
360(DEC), 361(DEC), 362(WUC), 363(DEC), 367(WUC)
368(WUC), 369(WUC), 372(DEC)

MINING: DISTRICT: Columbia NAME: Columbia PERIOD OF USE: 01/01 TO 12/31
ORES: coal
Acre Feet Contributed by this Right for this Use: Unevaluated

SUPPLEMENTAL GROUP NO.: **613984**. Water Rights Appurtenant to the following use(s):
91-28(CERT), 84(CERT), 114(WUC), 118(CERT), 125(WUC)
141(CERT), 143(CERT), 145(CERT), 158(CERT), 159(CERT)
360(DEC), 361(DEC), 362(WUC), 363(DEC), 367(WUC)
368(WUC), 369(WUC), 372(DEC)

MINING: DISTRICT: Sunnyside NAME: Sunnyside PERIOD OF USE: 01/01 TO 12/31
ORES: coal
Acre Feet Contributed by this Right for this Use: Unevaluated

SUPPLEMENTAL GROUP NO.: **613985**. Water Rights Appurtenant to the following use(s):
91-28(CERT), 84(CERT), 114(WUC), 118(CERT), 125(WUC)
141(CERT), 143(CERT), 145(CERT), 146(WUC), 148(CERT)
149(CERT), 150(CERT), 158(CERT), 159(CERT), 178(CERT)
183(CERT), 360(DEC), 361(DEC), 362(WUC), 363(DEC)
367(WUC), 368(WUC), 369(WUC), 372(DEC)

MINING: DISTRICT: Columbia NAME: Horse Canyon PERIOD OF USE: 01/01 TO 12/31
ORES: Coal
Acre Feet Contributed by this Right for this Use: Unevaluated
Administratively changed on Feb 14, 2007, by deleting the Domestic entry for 800 persons, and adding it to this Mining entry. The Mining was to employ and/or service the 800 persons.

INDUSTRIAL: In conjunction with the coal mining occurring at Horse Canyon.
Acre Feet Contributed by this Right for this Use: Unevaluated PERIOD OF USE: 01/01 TO 12/31

SUPPLEMENTAL GROUP NO.: **614007**. Water Rights Appurtenant to the following use(s):
91-28(CERT), 84(CERT), 114(WUC), 118(CERT), 125(WUC)
141(CERT), 146(WUC), 158(CERT), 360(DEC), 361(DEC)
362(WUC), 363(DEC), 367(WUC), 368(WUC), 369(WUC)
372(DEC)

IRRIGATION: Sole Supply: UNEVALUATED acres Group Total: 11.28 Div Limit: 45.12 acft. PERIOD OF USE: 04/01 TO 10/15

###PLACE OF USE:	NORTH WEST QUARTER				NORTH EAST QUARTER				SOUTH WEST QUARTER				SOUTH EAST				GROUP
	* NW	NE	SW	SE	* NW	NE	SW	SE	* NW	NE	SW	SE	* NW	NE			
Sec 06 T 15S R 14E SLBM	*				*					*11.2800				*			

SUPPLEMENTAL GROUP NO.: **614158**. Water Rights Appurtenant to the following use(s):
91-28(CERT), 84(CERT), 114(WUC), 118(CERT), 125(WUC)
141(CERT), 143(CERT), 144(CERT), 145(CERT), 146(WUC)
158(CERT), 178(CERT), 239(APP), 360(DEC), 361(DEC)
362(WUC), 363(DEC), 367(WUC), 368(WUC), 369(WUC)
372(DEC)

MUNICIPAL: Sunnyside PERIOD OF USE: 01/01 TO 12/31
Acre Feet Contributed by this Right for this Use: Unevaluated

SUPPLEMENTAL GROUP NO.: **614354**. Water Rights Appurtenant to the following use(s):
91-28(CERT), 84(CERT), 114(WUC), 125(WUC), 231(CERT)
362(WUC), 367(WUC), 368(WUC), 369(WUC)

IRRIGATION: Sole Supply: UNEVALUATED acres Group Total: 222.1 Div Limit: 0.0 acft. PERIOD OF USE: 04/01 TO 10/15
WUC 91-231 is limited to the irrigation requirements of 160.0 acres.

INDUSTRIAL: Water uses related to coal mining.
Acre Feet Contributed by this Right for this Use: Unevaluated PERIOD OF USE: 01/01 TO 12/31

###PLACE OF USE:	NORTH WEST QUARTER				NORTH EAST QUARTER				SOUTH WEST QUARTER				SOUTH EAST			
	* NW	NE	SW	SE	* NW	NE	SW	SE	* NW	NE	SW	SE	* NW	NE		
Sec 13 T 14S R 14E SLBM	*X	IX	IX	IX	*X	IX	IX	IX	*X	IX	IX	IX	*X	IX		
Sec 17 T 14S R 14E SLBM	*X	IX	IX	IX	*X	IX	IX	IX	*X	IX	IX	IX	*X	IX		
Sec 18 T 14S R 14E SLBM	*X	IX	IX	IX	*X	IX	IX	IX	*X	IX	IX	IX	*X	IX		
Sec 19 T 14S R 14E SLBM	*X	IX	IX	IX	*X	IX	IX	IX	*X	IX	IX	IX	*X	IX		

Sec 20 T 14S R 14E SLEB	*X	X	X	X	*X	X	X	X	*X	X	X	X	*X	X	X
Sec 21 T 14S R 14E SLEB	*X	X	X	X	*X	X	X	X	*X	X	X	X	*X	X	X
Sec 24 T 14S R 14E SLEB	*X	X	X	X	*X	X	X	X	*X	X	X	X	*X	X	X
Sec 28 T 14S R 14E SLEB	*X	X	X	X	*X	X	X	X	*X	X	X	X	*X	X	X
Sec 29 T 14S R 14E SLEB	*X	X	X	X	*X	X	X	X	*X	X	X	X	*X	X	X
Sec 30 T 14S R 14E SLEB	*X	X	X	X	*X	X	X	X	*X	X	X	X	*X	X	X
Sec 31 T 14S R 14E SLEB	*X	X	X	X	*X	X	X	X	*X	X	X	X	*X	X	X
Sec 32 T 14S R 14E SLEB	*X	X	X	X	*X	X	X	X	*X	X	X	X	*X	X	X
Sec 33 T 14S R 14E SLEB	*X	X	X	X	*X	X	X	X	*X	X	X	X	*X	X	X
Sec 34 T 14S R 14E SLEB	*X	X	X	X	*X	X	X	X	*X	X	X	X	*X	X	X
Sec 01 T 15S R 13E SLEB	*				*				2.3000*				*		
Sec 02 T 15S R 13E SLEB	* 3.5000	7.9000	20.5000	4.1000*					*				*		
Sec 03 T 15S R 13E SLEB	*			*					*				*		
Sec 10 T 15S R 13E SLEB	*	29.6000		3.6000*	11.7000	31.8000	1.1000		*				3.5000*		2
Sec 03 T 15S R 14E SLEB	*X	X	X	X	*X	X	X	X	*X	X	X	X	*X	X	X
Sec 04 T 15S R 14E SLEB	*X	X	X	X	*X	X	X	X	*X	X	X	X	*X	X	X
Sec 05 T 15S R 14E SLEB	* 4.4000			*					*				*		
Sec 06 T 15S R 14E SLEB	*		2.5000	14.3000*		0.2000	3.4000	7.2000*	12.2000	9.3000			3.7000*	24.2000	0.3000

GROUP

This Right (91-369) has an evaluated sole-supply total for irrigation of 0.0000 acres.

=====

This Right (91-369) is a member of 15 supplemental water right groups with irrigated acreage totaling 1583.4300 acres.

=====

Storage from 03/15 to 12/15, inclusive, in Grassy Trail Reservoir with a maximum capacity of 916.000 acre-feet, located in:

Height of Dam:	89	NORTH-WEST*	NORTH-EAST*	SOUTH-WEST*	SOUTH-EAST*
Area Inundated:		NW NE SW SE	NW NE SW SE	NW NE SW SE	NW NE SW SE
Sec 07 T 14S R 14E SLBM		* : : : *	* : : : *	* X : : *	* : : : *

Small Dam Required?: No

OTHER COMMENTS*****

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Utah Division of Water Rights

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Select Related Information

(WARNING: Water Rights makes NO claims as to the accuracy of this data.) RUN DATE: 01/26/2011

WATER RIGHT: 91-372 APPLICATION/CLAIM NO.: CERT. NO.: a556

CHANGES: a18520 Approved
a4245 Certificate a556 (Issued:)
t18432 Expired

OWNERSHIP*****

NAME: Sunnyside Cogeneration Associates (Public Water Supplier)
ADDR: c/o Brian Burnett, Callister Nebeker & McCullough
10 East South Temple, Ste. 900
Salt Lake City, UT 84133
INTEREST: 100% REMARKS:

DATES, ETC.*****

LAND OWNED BY APPLICANT? COUNTY TAX ID#:
FILED: PRIORITY: 00/00/1865 PUB BEGAN: PUB ENDED: NEWSPAPER:
ProtestEnd: PROTESTED: [No] HEARNG HLD: SE ACTION: [] ActionDate: PROOF DUE:
EXTENSION: ELEC/PROOF: [] ELEC/PROOF: CERT/WUC: LAP, ETC: LAPS LETTER:
RUSH LETTR: RENOVATE: RECON REQ: TYPE: []
PD BOOK: [91-5] MAP: [58c] PUB DATE:
*TYPE -- DOCUMENT -- STATUS

Type of Right: Decree Source of Info: Proposed Determination Status:

LOCATION OF WATER RIGHT*** (Points of Diversion: Click on Location to access PLAT Program.) *****MAP VIEWER*****

FLOW: 5.575 cfs SOURCE: Grassy Trail Creek
COUNTY: Carbon COMMON DESCRIPTION:

POINTS OF DIVERSION -- SURFACE:

(1) S 2824 ft W 1166 ft from N4 cor, Sec 07, T 14S, R 14E, SLBM
Diverting Works:
(2) S 1163 ft W 644 ft from NE cor, Sec 18, T 14S, R 14E, SLBM
Diverting Works:
(3) N 1521 ft W 1983 ft from SE cor, Sec 29, T 14S, R 14E, SLBM
Diverting Works:
(4) S 1013 ft E 125 ft from W4 cor, Sec 01, T 15S, R 13E, SLBM
Diverting Works:
(5) N 1604 ft E 1245 ft from SW cor, Sec 02, T 15S, R 13E, SLBM
Diverting Works:
(6) N 750 ft W 1345 ft from SE cor, Sec 03, T 15S, R 13E, SLBM
Diverting Works:
(7) S 566 ft E 4323 ft from NW cor, Sec 09, T 15S, R 13E, SLBM
Diverting Works:
(8) S 1149 ft E 1320 ft from NW cor, Sec 09, T 15S, R 13E, SLBM
Diverting Works:
(9) N 91 ft E 2390 ft from W4 cor, Sec 06, T 15S, R 14E, SLBM
Diverting Works:

Source:

Source:

Source:

Source:

Source:

Source:

Source:

Source:

Source:

Stream Alt Required?: No

USES OF WATER RIGHT***** ELU -- Equivalent Livestock Unit (cow, horse, etc.) ***** EDU -- Equivalent Domestic Unit or 1 Family

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Search

Select Related Information

(WARNING: Water Rights makes NO claims as to the accuracy of this data.) RUN DATE: 01/26/2011

WATER RIGHT: 91-1640

APPLICATION/CLAIM NO.:

CERT. NO.:

OWNERSHIP*****

NAME: Magnificent Seven L.L.C.

ADDR: c/o GREG JENSEN

111 E CLARK ST

ALBERTA LEA, MN 56007

INTEREST: 34.5% REMARKS: a Utah Limited Liability Company

NAME: Penta Creek L.L.C.

ADDR: c/o GREG JENSEN

111 E CLARK ST

ALBERTA LEA, MN 56007

INTEREST: 65.5% REMARKS: a Utah Limited Liability Company

DATES, ETC.*****

LAND OWNED BY APPLICANT? Yes

COUNTY TAX ID#:

FILED:

PRIORITY: 00/00/1869

PUB BEGAN:

PUB ENDED:

NEWSPAPER:

ProtestEnd:

PROTESTED: [No]

HEARNG HLD:

SE ACTION: [

ActionDate:

PROOF DUE:

EXTENSION:

ELEC/PROOF: [

ELEC/PROOF:

CERT/WUC:

LAP, ETC:

LAPS LETTER:

RUSH LETTR:

RENOVATE:

RECON REQ:

TYPE: [

]

PD BOOK: [91-5

MAP: [58

PUB DATE:

*TYPE -- DOCUMENT -- STATUS--

Type of Right: Diligence Claim

Source of Info: Proposed Determination

Status:

LOCATION OF WATER RIGHT*** (Points of Diversion: Click on Location to access PLAT Program.) *****MAP VIEWER*****

FLOW:

COUNTY: Carbon

COMMON DESCRIPTION:

SOURCE: Left Fork Grassy Trail Creek

POINT OF DIVERSION -- POINT TO POINT:

(1) Stockwatering directly on stream from a point at N 660 ft. E 660 ft. from SW corner, Sec 06, T14S, R14E, SLBM,
to a point at S 660 ft. E 1980 ft. from W4 corner, Sec 07, T14S, R14E, SLBM.

COMMENT: Administratively updated by State Engineer.

USES OF WATER RIGHT***** ELU -- Equivalent Livestock Unit (cow, horse, etc.) ***** EDU -- Equivalent Domestic Unit or 1 Family

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Utah Division of Water Rights

Search

Select Related Information

(WARNING: Water Rights makes NO claims as to the accuracy of this data.) RUN DATE: 01/26/2011

WATER RIGHT: 91-1665 APPLICATION/CLAIM NO.: CERT. NO.:

OWNERSHIP*****

NAME: W. Lavon & Marianne W. Day

ADDR: Castle Dale UT

REMARKS: joint tenants

DATES, ETC.*****

LAND OWNED BY APPLICANT? Yes

COUNTY TAX ID#:

FILED:

PRIORITY: 00/00/1969 PUB BEGAN:

PUB ENDED:

NEWSPAPER:

ProtestEnd:

PROTESTED: [No]

HEARING HLD:

SE ACTION: [

ActionDate:

PROOF DUE:

EXTENSION:

ELEC/PROOF: [

ELEC/PROOF:

CERT/WUC: 09/11/1967 LAP, ETC:

LAPS LETTER:

RUSH LETTR:

RENOVATE:

RECON REQ:

TYPE: [

]

PD BOOK: [91-5

MAP: [57

PUB DATE:

*TYPE -- DOCUMENT -- STATUS--

Type of Right: Diligence Claim

Source of Info: Proposed Determination

Status:

LOCATION OF WATER RIGHT*** (Points of Diversion: Click on Location to access PLAT Program.) *****MAP VIEWER*****

FLOW:

SOURCE: Left Fork Whitmore Canyon Creek

COUNTY: Carbon

COMMON DESCRIPTION:

POINT OF DIVERSION -- POINT TO POINT:

(1) Stockwatering directly on stream from a point at N 660 ft. W 660 ft. from S4 corner, Sec 35, T13S, R13E, SLBM,
to a point at N 660 ft. W 660 ft. from S4 corner, Sec 35, T13S, R13E, SLBM.

COMMENT: Administratively updated by State Engineer.

USES OF WATER RIGHT***** ELU -- Equivalent Livestock Unit (cow, horse, etc.) ***** EDU -- Equivalent Domestic Unit or 1 Family

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Utah Division of Water Rights

Select Related Information

(WARNING: Water Rights makes NO claims as to the accuracy of this data.) RUN DATE: 01/26/2011

WATER RIGHT: 91-1666

APPLICATION/CLAIM NO.:

CERT. NO.:

OWNERSHIP*****

NAME: W. Lavon & Marianne W. Day

ADDR: Castle Dale UT

REMARKS: joint tenants

DATES, ETC.*****

LAND OWNED BY APPLICANT? Yes

COUNTY TAX ID#:

FILED:

PRIORITY: 00/00/1869|PUB BEGAN:

PUB ENDED:

NEWSPAPER:

ProtestEnd:

PROTESTED: [No]

HEARING HLD:

SE ACTION: [

ActionDate:

PROOF DUE:

EXTENSION:

ELEC/PROOF: [

ELEC/PROOF:

CERT/WUC: 09/11/1967

LAP, ETC:

LAPS LETTER:

RUSH LETTR:

RENOVATE:

RECON REQ:

TYPE: [

PUB DATE:

PD BOOK: [91-5

MAP: [46

PUB DATE:

*TYPE -- DOCUMENT -- STATUS--

Type of Right: Diligence Claim

Source of Info: Proposed Determination

Status:

LOCATION OF WATER RIGHT***(Points of Diversion: Click on Location to access PLAT Program.)*****MAP VIEWER*****

FLOW:

COUNTY: Carbon

COMMON DESCRIPTION:

SOURCE: Spring Stream

POINT OF DIVERSION -- POINT TO POINT:

(1) Stockwatering directly on stream from a point at S 660 ft. W 660 ft. from NE corner, Sec 22, T13S, R13E, SLBM,
to a point at N 660 ft. W 660 ft. from E4 corner, Sec 34, T13S, R13E, SLBM.

COMMENT: Administratively updated by State Engineer.

SOURCE: Spring Stream

USES OF WATER RIGHT***** ELU -- Equivalent Livestock Unit (cow, horse, etc.) ***** EDU -- Equivalent Domestic Unit or 1 Family*****

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Select Related Information

(WARNING: Water Rights makes NO claims as to the accuracy of this data.) RUN DATE: 01/26/2011

WATER RIGHT: 91-1667 APPLICATION/CLAIM NO.: CERT. NO.:

OWNERSHIP*****

NAME: W. Lavon & Marianne W. Day
ADDR: Castle Dale UT

REMARKS: joint tenants

DATES, ETC.*****

LAND OWNED BY APPLICANT? Yes	COUNTY TAX ID#:		
FILED:	PRIORITY: 00/00/1869	PUB BEGAN:	PUB ENDED:
ProtestEnd:	PROTESTED: [No]	HEARNG HLD:	SE ACTION: {
EXTENSION:	ELEC/PROOF: {	ELEC/PROOF:	CERT/WUC: 09/11/1967
RUSH LETTR:	RENOVATE:	RECON REQ:	TYPE: {
PD BOOK: [91-5]	MAP: [57]	PUB DATE:	

*TYPE -- DOCUMENT -- STATUS

Type of Right: Diligence Claim Source of Info: Proposed Determination Status:

LOCATION OF WATER RIGHT***(Points of Diversion: Click on Location to access PLAT Program.)*****MAP VIEWER*****

FLOW: 0.011 cfs SOURCE: Unnamed Spring
COUNTY: Carbon COMMON DESCRIPTION:

POINT OF DIVERSION:

(1) Stockwatering directly on spring located at N 660 ft. W 660 ft. from E4 corner, Sec 34, T13S, R13E, SLBM.
COMMENT: Administratively updated by State Engineer.

USBS OF WATER RIGHT***** ELU -- Equivalent Livestock Unit (cow, horse, etc.) ***** EDU -- Equivalent Domestic Unit or 1 Family

SUPPLEMENTAL GROUP NO.: 614121. Water Rights Appurtenant to the following use(s):

91-1661(DIL), 1662(DIL), 1664(DIL), 1665(DIL), 1666(DIL),
1667(DIL), 1668(DIL), 1669(DIL), 1671(DIL), 1672(DIL),
1673(DIL), 1674(DIL), 1682(DIL), 1683(DIL), 1685(DIL),
1686(DIL), 1687(DIL), 1688(DIL), 1689(DIL), 1690(DIL),
1692(DIL), 1693(DIL), 1694(DIL), 1695(DIL), 1703(DIL),
1704(DIL), 1706(DIL), 1707(DIL), 1708(DIL), 1709(DIL),
3474(DIL), 3475(DIL), 3476(DIL), 3477(DIL), 3478(DIL),
3479(DIL), 3480(DIL), 3481(DIL), 3482(DIL), 3483(DIL),
3484(DIL), 3485(DIL), 3486(DIL), 3487(DIL), 3488(DIL),
3489(DIL), 3490(DIL), 3491(DIL), 3492(DIL), 3493(DIL),
3494(DIL), 3495(DIL), 3496(DIL), 3497(DIL), 3498(DIL)

STOCKWATER: Sole Supply: UNEVALUATED ELUs Group Total: 1000.0000 Div Limit: 15.0 acft. PERIOD OF USE: 01/01 TO 12/31

PLACE OF USE for STOCKWATERING*****

	NORTH-WEST¼	NORTH-EAST¼	SOUTH-WEST¼	SOUTH-EAST¼
	NW NE SW SE	NW NE SW SE	NW NE SW SE	NW NE SW SE
Sec 34 T 13S R 13E SLBM	* : : *	* : : X*	* : : *	* : : *

***** E N D O F D A T A *****



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Utah Division of Water Rights

Select Related Information

(WARNING: Water Rights makes NO claims as to the accuracy of this data.) RUN DATE: 01/26/2011

WATER RIGHT: 91-1672 APPLICATION/CLAIM NO.: CERT. NO.:

OWNERSHIP*****

NAME: W. Lavon & Marianne W. Day

ADDR: Castle Dale UT

REMARKS: joint tenants

DATES, ETC.*****

LAND OWNED BY APPLICANT? Yes COUNTY TAX ID#:
FILED: PRIORITY: 00/00/1869 PUB BEGAN: NEWSPAPER:
ProtestEnd: PROTESTED: [No] HEARING HLD: SE ACTION: [] ActionDate: PROOF DUE:
EXTENSION: ELEC/PROOF: [] ELEC/PROOF: CERT/WUC: 12/08/1967 LAP, ETC: LAPS LETTER:
RUSH LETTR: RENOVATE: RECON REQ: TYPE: []
PD BOOK: [91-5] MAP: [57] PUB DATE:

*TYPE -- DOCUMENT -- STATUS--

Type of Right: Diligence Claim Source of Info: Proposed Determination Status:

LOCATION OF WATER RIGHT***(Points of Diversion: Click on Location to access PLAT Program.)*****MAP VIEWER*****

FLOW: SOURCE: Left Fork Whitmore Canyon Creek

COUNTY: Carbon COMMON DESCRIPTION:

POINT OF DIVERSION -- POINT TO POINT:

(1) Stockwatering directly on stream from a point at N 660 ft. W 660 ft. from S4 corner, Sec 35, T13S, R13E, SLBM,
to a point at N 660 ft. W 660 ft. from S4 corner, Sec 35, T13S, R13E, SLBM.

COMMENT: Administratively updated by State Engineer.

USES OF WATER RIGHT***** ELU -- Equivalent Livestock Unit (cow, horse, etc.) ***** EDU -- Equivalent Domestic Unit or 1 Family

SUPPLEMENTAL GROUP NO.: 614121. Water Rights Appurtenant to the following use(s):

91-1661(DIL), 1662(DIL), 1664(DIL), 1665(DIL), 1666(DIL),
1667(DIL), 1668(DIL), 1669(DIL), 1671(DIL), 1672(DIL),
1673(DIL), 1674(DIL), 1682(DIL), 1683(DIL), 1685(DIL),
1686(DIL), 1687(DIL), 1688(DIL), 1689(DIL), 1690(DIL),
1692(DIL), 1693(DIL), 1694(DIL), 1695(DIL), 1703(DIL),
1704(DIL), 1706(DIL), 1707(DIL), 1708(DIL), 1709(DIL),
3474(DIL), 3475(DIL), 3476(DIL), 3477(DIL), 3478(DIL),
3479(DIL), 3480(DIL), 3481(DIL), 3482(DIL), 3483(DIL),
3484(DIL), 3485(DIL), 3486(DIL), 3487(DIL), 3488(DIL),
3489(DIL), 3490(DIL), 3491(DIL), 3492(DIL), 3493(DIL),
3494(DIL), 3495(DIL), 3496(DIL), 3497(DIL), 3498(DIL)

STOCKWATER: Sole Supply: UNEVALUATED ELUs Group Total: 1000.0000 Div Limit: 15.0 acft. PERIOD OF USE: 01/01 TO 12/31

PLACE OF USE for STOCKWATERING*****

	NORTH-WEST¼	NORTH-EAST¼	SOUTH-WEST¼	SOUTH-EAST¼
	NW NE SW SE	NW NE SW SE	NW NE SW SE	NW NE SW SE
Sec 35 T 13S R 13E SLBM	* : : *	* : : *	* : : X*	* : : *

*****E N D O F D A T A*****

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Utah Division of Water Rights

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Select Related Information

(WARNING: Water Rights makes NO claims as to the accuracy of this data.) RUN DATE: 01/26/2011

WATER RIGHT: 91-1673

APPLICATION/CLAIM NO.:

CERT. NO.:

OWNERSHIP*****

NAME: W. Lavon & Marianne W. Day

ADDR: Castle Dale UT

REMARKS: joint tenants

DATES, ETC.*****

LAND OWNED BY APPLICANT? Yes

COUNTY TAX ID#:

FILED:

PRIORITY: 00/00/1869|PUB BEGAN:

|PUB ENDED:

|NEWSPAPER:

ProtestEnd:

|PROTESTED: [No]

|HEARNG HLD:

|SE ACTION: [

]|ActionDate:

|PROOF DUE:

EXTENSION:

|ELEC/PROOF: [

]|ELEC/PROOF:

|CERT/WUC: 12/08/1967|LAP, ETC:

|LAPS LETTER:

RUSH LETTR:

|RENOVATE:

|RECON REQ:

|TYPE: [

PD BOOK: [91-5

]|MAP: [46

]|PUB DATE:

*TYPE -- DOCUMENT -- STATUS--

Type of Right: Diligence Claim

Source of Info: Proposed Determination

Status:

LOCATION OF WATER RIGHT*** (Points of Diversion: Click on Location to access PLAT Program.)*****[MAP VIEWER](#)*****

FLOW:

SOURCE: Spring Stream

COUNTY: Carbon

COMMON DESCRIPTION:

POINT OF DIVERSION -- POINT TO POINT:

(1) Stockwatering directly on stream from a point at S 660 ft. W 660 ft. from NE corner, Sec 22, T13S, R13E, SLBM,
to a point at N 660 ft. W 660 ft. from E4 corner, Sec 34, T13S, R13E, SLBM.

COMMENT: Administratively updated by State Engineer.

SOURCE: Spring Stream

USES OF WATER RIGHT***** ELU -- Equivalent Livestock Unit (cow, horse, etc.) ***** EDU -- Equivalent Domestic Unit or 1 Family

SUPPLEMENTAL GROUP NO.: 614121. Water Rights Appurtenant to the following use(s):

91-1661(DIL), 1662(DIL), 1664(DIL), 1665(DIL), 1666(DIL)
1667(DIL), 1668(DIL), 1669(DIL), 1671(DIL), 1672(DIL)
1673(DIL), 1674(DIL), 1682(DIL), 1683(DIL), 1685(DIL)
1686(DIL), 1687(DIL), 1688(DIL), 1689(DIL), 1690(DIL)
1692(DIL), 1693(DIL), 1694(DIL), 1695(DIL), 1703(DIL)
1704(DIL), 1706(DIL), 1707(DIL), 1708(DIL), 1709(DIL)
3474(DIL), 3475(DIL), 3476(DIL), 3477(DIL), 3478(DIL)
3479(DIL), 3480(DIL), 3481(DIL), 3482(DIL), 3483(DIL)
3484(DIL), 3485(DIL), 3486(DIL), 3487(DIL), 3488(DIL)
3489(DIL), 3490(DIL), 3491(DIL), 3492(DIL), 3493(DIL)
3494(DIL), 3495(DIL), 3496(DIL), 3497(DIL), 3498(DIL)

STOCKWATER: Sole Supply: UNEVALUATED ELUS Group Total: 1000.0000 Div Limit: 15.0 acft. PERIOD OF USE: 01/01 TO 12/31

PLACE OF USE for STOCKWATERING*****

	NORTH-WEST¼	NORTH-EAST¼	SOUTH-WEST¼	SOUTH-EAST¼
	NW NE SW SE	NW NE SW SE	NW NE SW SE	NW NE SW SE
Sec 22 T 13S R 13E SLBM	* : : *	* : X : *	* : : *	* : : *
Sec 34 T 13S R 13E SLBM	* : : *	* : : X*	* : : *	* : : *

*****END OF DATA*****



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Utah Division of Water Rights

Select Related Information

(WARNING: Water Rights makes NO claims as to the accuracy of this data.) RUN DATE: 01/26/2011

WATER RIGHT: 91-1674 APPLICATION/CLAIM NO.: CERT. NO.:

OWNERSHIP*****

NAME: W. Lavon & Marianne W. Day

ADDR: Castle Dale UT

REMARKS: joint tenants

DATES, ETC.*****

LAND OWNED BY APPLICANT? Yes COUNTY TAX ID#:

FILED: PRIORITY: 00/00/1869 PUB BEGAN: NEWSPAPER:

ProtestEnd: PROTESTED: [No] HEARING HLD: SE ACTION: [] ActionDate: PROOF DUE:

EXTENSION: ELEC/PROOF: [] ELEC/PROOF: CERT/WUC: 12/08/1967 LAP, ETC: LAPS LETTER:

RUSH LETTR: RENOVATE: RECON REQ: TYPE: []

PD BOOK: [91-5] MAP: [57] PUB DATE:

*TYPE -- DOCUMENT -- STATUS

Type of Right: Diligence Claim

Source of Info: Proposed Determination

Status:

LOCATION OF WATER RIGHT***(Points of Diversion: Click on Location to access PLAT Program.)*****MAP VIEWER*****

FLOW: 0.011 cfs

SOURCE: Unnamed Spring

COUNTY: Carbon

COMMON DESCRIPTION:

POINT OF DIVERSION:

(1) Stockwatering directly on spring located at N 660 ft. W 660 ft. from E4 corner, Sec 34, T13S, R13E, SLBM.

COMMENT: Administratively updated by State Engineer.

USES OF WATER RIGHT***** ELU -- Equivalent Livestock Unit (cow, horse, etc.) ***** EDU -- Equivalent Domestic Unit or 1 Family

SUPPLEMENTAL GROUP NO.: 614121. Water Rights Appurtenant to the following use(s):

91-1661(DIL), 1662(DIL), 1664(DIL), 1665(DIL), 1666(DIL)

1667(DIL), 1668(DIL), 1669(DIL), 1671(DIL), 1672(DIL)

1673(DIL), 1674(DIL), 1682(DIL), 1683(DIL), 1685(DIL)

1686(DIL), 1687(DIL), 1688(DIL), 1689(DIL), 1690(DIL)

1692(DIL), 1693(DIL), 1694(DIL), 1695(DIL), 1703(DIL)

1704(DIL), 1706(DIL), 1707(DIL), 1708(DIL), 1709(DIL)

3474(DIL), 3475(DIL), 3476(DIL), 3477(DIL), 3478(DIL)

3479(DIL), 3480(DIL), 3481(DIL), 3482(DIL), 3483(DIL)

3484(DIL), 3485(DIL), 3486(DIL), 3487(DIL), 3488(DIL)

3489(DIL), 3490(DIL), 3491(DIL), 3492(DIL), 3493(DIL)

3494(DIL), 3495(DIL), 3496(DIL), 3497(DIL), 3498(DIL)

STOCKWATER: Sole Supply: UNEVALUATED ELUS Group Total: 1000.0000 Div Limit: 15.0 acft. PERIOD OF USE: 01/01 TO 12/31

PLACE OF USE for STOCKWATERING*****

	NORTH-WEST¼	NORTH-EAST¼	SOUTH-WEST¼	SOUTH-EAST¼
Sec 34 T 13S R 13E SLBM	NW NE SW SE	NW NE SW SE	NW NE SW SE	NW NE SW SE
	* : : *	* : : X*	* : : *	* : : *

*****E N D O F D A T A*****

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Utah Division of Water Rights

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(WARNING: Water Rights makes NO claims as to the accuracy of this data.) RUN DATE: 01/26/2011

WATER RIGHT: **91-1686** APPLICATION/CLAIM NO.: CERT. NO.:

OWNERSHIP*****

NAME: W. Lavon & Marianne W. Day
ADDR: Castle Dale UT

REMARKS: joint tenants

DATES, ETC.*****

LAND OWNED BY APPLICANT? Yes COUNTY TAX ID#:

FILED:	PRIORITY: 00/00/1869	PUB BEGAN:	PUB ENDED:	NEWSPAPER:
ProtestEnd:	PROTESTED: [No]	HEARING HLD:	SE ACTION: [	ActionDate:
EXTENSION:	ELEC/PROOF:[	ELEC/PROOF:	CERT/WUC: 03/08/1972	LAP, ETC:
RUSH LETTR:	RENOVATE:	RECON REQ:	TYPE: [	LAPS LETTER:
PD BOOK: [91-5	MAP: [57	PUB DATE:		

*TYPE -- DOCUMENT -- STATUS--

Type of Right: Diligence Claim

Source of Info: Proposed Determination

Status:

LOCATION OF WATER RIGHT*** (Points of Diversion: Click on Location to access PLAT Program.) *****[MAP VIEWER](#)*****

FLOW:

COUNTY: Emery

COMMON DESCRIPTION:

SOURCE: Left Fork Whitmore Canyon Creek

POINT OF DIVERSION -- POINT TO POINT:

(1) Stockwatering directly on stream from a point at N 660 ft. W 660 ft. from S4 corner, Sec 35, T13S, R13E, SLBM,
to a point at N 660 ft. W 660 ft. from S4 corner, Sec 35, T13S, R13E, SLBM.

COMMENT: Administratively updated by State Engineer.

USES OF WATER RIGHT***** ELU -- Equivalent Livestock Unit (cow, horse, etc.) ***** EDU -- Equivalent Domestic Unit or 1 Family



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Select Related Information

(WARNING: Water Rights makes NO claims as to the accuracy of this data.) RUN DATE: 01/26/2011

WATER RIGHT: 91-1687

APPLICATION/CLAIM NO.:

CERT. NO.:

OWNERSHIP*****

NAME: W. Lavon & Marianne W. Day

ADDR: Castle Dale UT

REMARKS: joint tenants

DATES, ETC.*****

LAND OWNED BY APPLICANT? Yes

COUNTY TAX ID#:

FILED:

PRIORITY: 00/00/1869

PUB BEGAN:

PUB ENDED:

NEWSPAPER:

ProtestEnd:

PROTESTED: [No]

HEARNG HLD:

SE ACTION: [

ActionDate:

PROOF DUE:

EXTENSION:

ELEC/PROOF: [

ELEC/PROOF:

CERT/WUC: 03/08/1972

LAP, ETC:

LAPS LETTER:

RUSH LETTR:

RENOVATE:

RECON REQ:

TYPE: [

PUB DATE:

PD BOOK: [91-5

MAP: [46

PUB DATE:

*TYPE -- DOCUMENT -- STATUS

Type of Right: Diligence Claim

Source of Info: Proposed Determination

Status:

LOCATION OF WATER RIGHT***(Points of Diversion: Click on Location to access PLAT Program.)*****MAP VIEWER*****

FLOW:

SOURCE: Spring Stream

COUNTY: Emery

COMMON DESCRIPTION:

POINT OF DIVERSION -- POINT TO POINT:

(1) Stockwatering directly on stream from a point at S 660 ft. W 660 ft. from NE corner, Sec 22, T13S, R13E, SLBM, to a point at N 660 ft. W 660 ft. from E4 corner, Sec 34, T13S, R13E, SLBM.

COMMENT: Administratively updated by State Engineer.

USES OF WATER RIGHT***** ELU -- Equivalent Livestock Unit (cow, horse, etc.) ***** EDU -- Equivalent Domestic Unit or 1 Family

SUPPLEMENTAL GROUP NO.: 614121. Water Rights Appurtenant to the following use(s):

91-1661(DIL), 1662(DIL), 1664(DIL), 1665(DIL), 1666(DIL),
1667(DIL), 1668(DIL), 1669(DIL), 1671(DIL), 1672(DIL),
1673(DIL), 1674(DIL), 1682(DIL), 1683(DIL), 1685(DIL),
1686(DIL), 1687(DIL), 1688(DIL), 1689(DIL), 1690(DIL),
1692(DIL), 1693(DIL), 1694(DIL), 1695(DIL), 1703(DIL),
1704(DIL), 1706(DIL), 1707(DIL), 1708(DIL), 1709(DIL),
3474(DIL), 3475(DIL), 3476(DIL), 3477(DIL), 3478(DIL),
3479(DIL), 3480(DIL), 3481(DIL), 3482(DIL), 3483(DIL),
3484(DIL), 3485(DIL), 3486(DIL), 3487(DIL), 3488(DIL),
3489(DIL), 3490(DIL), 3491(DIL), 3492(DIL), 3493(DIL),
3494(DIL), 3495(DIL), 3496(DIL), 3497(DIL), 3498(DIL)

STOCKWATER: Sole Supply: UNEVALUATED ELUs Group Total: 1000.0000 Div Limit: 15.0 acft. PERIOD OF USE: 01/01 TO 12/31

PLACE OF USE for STOCKWATERING*****

	NORTH-WEST¼	NORTH-EAST¼	SOUTH-WEST¼	SOUTH-EAST¼
	NW NE SW SE	NW NE SW SE	NW NE SW SE	NW NE SW SE
Sec 22 T 13S R 13E SLBM	* : : *	* : X: : *	* : : : *	* : : : *
Sec 34 T 13S R 13E SLBM	* : : *	* : : : X*	* : : : *	* : : : *

*****E N D O F D A T A*****

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Select Related Information

(WARNING: Water Rights makes NO claims as to the accuracy of this data.) RUN DATE: 01/26/2011

WATER RIGHT: 91-1688

APPLICATION/CLAIM NO.:

CERT. NO.:

OWNERSHIP*****

NAME: W. Lavon & Marianne W. Day

ADDR: Castle Dale UT

REMARKS: joint tenants

DATES, ETC.*****

LAND OWNED BY APPLICANT? Yes COUNTY TAX ID#:

FILED:	PRIORITY: 00/00/1869	PUB BEGAN:	PUB ENDED:	NEWSPAPER:
ProtestEnd:	PROTESTED: [No]	HEARNG HLD:	SE ACTION: [	ActionDate:
EXTENSION:	ELEC/PROOF: [	ELEC/PROOF:	CERT/WUC: 03/08/1972	LAP, ETC:
RUSH LETTR:	RENOVATE:	RECON REQ:	TYPE: [
PD BOOK: [91-5	MAP: [57	PUB DATE:		

*TYPE -- DOCUMENT -- STATUS--

Type of Right: Diligence Claim

Source of Info: Proposed Determination

Status:

LOCATION OF WATER RIGHT*** (Points of Diversion: Click on Location to access PLAT Program.)*****MAP VIEWER*****

FLOW: 0.011 cfs

SOURCE: Unnamed Spring

COUNTY: Emery

COMMON DESCRIPTION:

POINT OF DIVERSION:

(1) Stockwatering directly on spring located at N 660 ft. W 660 ft. from E4 corner, Sec 34, T13S, R13E, SLBM.
COMMENT: Administratively updated by State Engineer.

USES OF WATER RIGHT***** ELU -- Equivalent Livestock Unit (cow, horse, etc.) ***** EDU -- Equivalent Domestic Unit or 1 Family

SUPPLEMENTAL GROUP NO.: 614121. Water Rights Appurtenant to the following use(s):

91-1661(DIL), 1662(DIL), 1664(DIL), 1665(DIL), 1666(DIL)
1667(DIL), 1668(DIL), 1669(DIL), 1671(DIL), 1672(DIL)
1673(DIL), 1674(DIL), 1682(DIL), 1683(DIL), 1685(DIL)
1686(DIL), 1687(DIL), 1688(DIL), 1689(DIL), 1690(DIL)
1692(DIL), 1693(DIL), 1694(DIL), 1695(DIL), 1703(DIL)
1704(DIL), 1706(DIL), 1707(DIL), 1708(DIL), 1709(DIL)
3474(DIL), 3475(DIL), 3476(DIL), 3477(DIL), 3478(DIL)
3479(DIL), 3480(DIL), 3481(DIL), 3482(DIL), 3483(DIL)
3484(DIL), 3485(DIL), 3486(DIL), 3487(DIL), 3488(DIL)
3489(DIL), 3490(DIL), 3491(DIL), 3492(DIL), 3493(DIL)
3494(DIL), 3495(DIL), 3496(DIL), 3497(DIL), 3498(DIL)

STOCKWATER: Sole Supply: UNEVALUATED ELUS

Group Total: 1000.0000

Div Limit: 15.0 acft.

PERIOD OF USE: 01/01 TO 12/31

PLACE OF USE for STOCKWATERING*****

	NORTH-WEST¼ NW NE SW SE	NORTH-EAST¼ NW NE SW SE	SOUTH-WEST¼ NW NE SW SE	SOUTH-EAST¼ NW NE SW SE
Sec 34 T 13S R 13E SLBM	* : : : *	* : : : X*	* : : : *	* : : : *

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(WARNING: Water Rights makes NO claims as to the accuracy of this data.) RUN DATE: 01/26/2011

WATER RIGHT: 91-1693

APPLICATION/CLAIM NO.:

CERT. NO.:

OWNERSHIP*****

NAME: W. Lavon & Marianne W. Day

ADDR: Castle Dale UT

REMARKS: joint tenants

DATES, ETC.*****

LAND OWNED BY APPLICANT? Yes

COUNTY TAX ID#:

FILED:

PRIORITY: 00/00/1869

PUB BEGAN:

PUB ENDED:

NEWSPAPER:

ProtestEnd:

PROTESTED: [No]

HEARNG HLD:

ISE ACTION: [

ActionDate:

PROOF DUE:

EXTENSION:

ELEC/PROOF: [

ELEC/PROOF:

CERT/WUC: 01/02/1968

LAP, ETC:

LAPS LETTER:

RUSH LETTR:

RENOVATE:

RECON REQ:

TYPE: [

]

PD BOOK: [91-5

MAP: [57

PUB DATE:

*TYPE -- DOCUMENT -- STATUS--

Type of Right: Diligence Claim

Source of Info: Proposed Determination

Status:

LOCATION OF WATER RIGHT*** (Points of Diversion: Click on Location to access PLAT Program.) *****MAP VIEWER*****

FLOW:

SOURCE: Left Fork Whitmore Canyon Creek

COUNTY: Carbon

COMMON DESCRIPTION:

POINT OF DIVERSION -- POINT TO POINT:

(1) Stockwatering directly on stream from a point at N 660 ft. W 660 ft. from S4 corner, Sec 35, T13S, R13E, SLBM,
to a point at N 660 ft. W 660 ft. from S4 corner, Sec 35, T13S, R13E, SLBM.

COMMENT: Administratively updated by State Engineer.

USES OF WATER RIGHT***** ELU -- Equivalent Livestock Unit (cow, horse, etc.) ***** EDU -- Equivalent Domestic Unit or 1 Family

SUPPLEMENTAL GROUP NO.: 614121. Water Rights Appurtenant to the following use(s):

91-1661(DIL), 1662(DIL), 1664(DIL), 1665(DIL), 1666(DIL),
1667(DIL), 1668(DIL), 1669(DIL), 1671(DIL), 1672(DIL),
1673(DIL), 1674(DIL), 1682(DIL), 1683(DIL), 1685(DIL),
1686(DIL), 1687(DIL), 1688(DIL), 1689(DIL), 1690(DIL),
1692(DIL), 1693(DIL), 1694(DIL), 1695(DIL), 1703(DIL),
1704(DIL), 1706(DIL), 1707(DIL), 1708(DIL), 1709(DIL),
3474(DIL), 3475(DIL), 3476(DIL), 3477(DIL), 3478(DIL),
3479(DIL), 3480(DIL), 3481(DIL), 3482(DIL), 3483(DIL),
3484(DIL), 3485(DIL), 3486(DIL), 3487(DIL), 3488(DIL),
3489(DIL), 3490(DIL), 3491(DIL), 3492(DIL), 3493(DIL),
3494(DIL), 3495(DIL), 3496(DIL), 3497(DIL), 3498(DIL)

STOCKWATER: Sole Supply: UNEVALUATED ELUS

Group Total: 1000.0000

Div Limit: 15.0 acft.

PERIOD OF USE: 01/01 TO 12/31

PLACE OF USE for STOCKWATERING*****

	NORTH-WEST¼ NW NE SW SE	NORTH-EAST¼ NW NE SW SE	SOUTH-WEST¼ NW NE SW SE	SOUTH-EAST¼ NW NE SW SE
Sec 35 T 13S R 13E SLBM	* : : *	* : : *	* : : X*	* : : *

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(WARNING: Water Rights makes NO claims as to the accuracy of this data.) RUN DATE: 01/26/2011

WATER RIGHT: 91-1694

APPLICATION/CLAIM NO.:

CERT. NO.:

OWNERSHIP*****

NAME: W. Lavon & Marianne W. Day

ADDR: Castle Dale UT

REMARKS: joint tenants

DATES, ETC.*****

LAND OWNED BY APPLICANT? Yes

COUNTY TAX ID#:

FILED:

PRIORITY: 00/00/1869|PUB BEGAN:

|PUB ENDED:

|NEWSPAPER:

ProtestEnd:

|PROTESTED: [No]

|HEARNG HLD:

|SE ACTION: [

|ActionDate:

|PROOF DUE:

EXTENSION:

|ELEC/PROOF: [

|ELEC/PROOF:

|CERT/WUC: 01/02/1968|LAP, ETC:

|LAPS LETTER:

RUSH LETTR:

|RENOVATE:

|RECON REQ:

|TYPE: [

|PUB DATE:

PD BOOK: [91-5

|MAP: [46

|PUB DATE:

*TYPE -- DOCUMENT -- STATUS

Type of Right: Diligence Claim

Source of Info: Proposed Determination

Status:

LOCATION OF WATER RIGHT***(Points of Diversion: Click on Location to access PLAT Program.)*****MAP VIEWER*****

FLOW:

SOURCE: Spring Stream

COUNTY: Carbon

COMMON DESCRIPTION:

POINT OF DIVERSION -- POINT TO POINT:

(1) Stockwatering directly on stream from a point at S 660 ft. W 660 ft. from NE corner, Sec 22, T13S, R13E, SLBM,
to a point at N 660 ft. W 660 ft. from E4 corner, Sec 34, T13S, R13E, SLBM.

COMMENT: Administratively updated by State Engineer.

USES OF WATER RIGHT***** ELU -- Equivalent Livestock Unit (cow, horse, etc.) ***** EDU -- Equivalent Domestic Unit or 1 Family

SUPPLEMENTAL GROUP NO.: 614121. Water Rights Appurtenant to the following use(s):

91-1661(DIL), 1662(DIL), 1664(DIL), 1665(DIL), 1666(DIL),
1667(DIL), 1668(DIL), 1669(DIL), 1671(DIL), 1672(DIL),
1673(DIL), 1674(DIL), 1682(DIL), 1683(DIL), 1685(DIL),
1686(DIL), 1687(DIL), 1688(DIL), 1689(DIL), 1690(DIL),
1692(DIL), 1693(DIL), 1694(DIL), 1695(DIL), 1703(DIL),
1704(DIL), 1706(DIL), 1707(DIL), 1708(DIL), 1709(DIL),
3474(DIL), 3475(DIL), 3476(DIL), 3477(DIL), 3478(DIL),
3479(DIL), 3480(DIL), 3481(DIL), 3482(DIL), 3483(DIL),
3484(DIL), 3485(DIL), 3486(DIL), 3487(DIL), 3488(DIL),
3489(DIL), 3490(DIL), 3491(DIL), 3492(DIL), 3493(DIL),
3494(DIL), 3495(DIL), 3496(DIL), 3497(DIL), 3498(DIL)

STOCKWATER: Sole Supply: UNEVALUATED ELUs Group Total: 1000.0000 Div Limit: 15.0 acft. PERIOD OF USE: 01/01 TO 12/31

PLACE OF USE for STOCKWATERING*****

	NORTH-WEST¼	NORTH-EAST¼	SOUTH-WEST¼	SOUTH-EAST¼
	NW NE SW SE	NW NE SW SE	NW NE SW SE	NW NE SW SE
Sec 22 T 13S R 13E SLBM	* : : *	* : X: : *	* : : : *	* : : : *
Sec 34 T 13S R 13E SLBM	* : : *	* : : : X*	* : : : *	* : : : *

*****E N D O F D A T A*****

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(WARNING: Water Rights makes NO claims as to the accuracy of this data.) RUN DATE: 01/26/2011

WATER RIGHT: 91-1695

APPLICATION/CLAIM NO.:

CERT. NO.:

OWNERSHIP*****

NAME: W. Lavon & Marianne W. Day

ADDR: Castle Dale UT

REMARKS: joint tenants

DATES, ETC.*****

LAND OWNED BY APPLICANT? Yes

COUNTY TAX ID#:

FILED:

PRIORITY: 00/00/1869

PUB BEGAN:

PUB ENDED:

NEWSPAPER:

ProtestEnd:

PROTESTED: [No]

HEARNG HLD:

SE ACTION: [

ActionDate:

PROOF DUE:

EXTENSION:

ELEC/PROOF: [

ELEC/PROOF:

CERT/WUC: 01/02/1968

LAP, ETC:

LAPS LETTER:

RUSH LETTR:

RENOVATE:

RECON REQ:

I TYPE: [

]

PD BOOK: [91-5

MAP: [57

PUB DATE:

*TYPE -- DOCUMENT -- STATUS

Type of Right: Diligence Claim

Source of Info: Proposed Determination

Status:

LOCATION OF WATER RIGHT*** (Points of Diversion: Click on Location to access PLAT Program.)*****MAP VIEWER*****

FLOW: 0.011 cfs

SOURCE: Unnamed Spring

COUNTY: Carbon

COMMON DESCRIPTION:

POINT OF DIVERSION:

(1) Stockwatering directly on spring located at N 660 ft. W 660 ft. from E4 corner, Sec 34, T13S, R13E, SLBM.

COMMENT: Administratively updated by State Engineer.

USES OF WATER RIGHT***** ELU -- Equivalent Livestock Unit (cow, horse, etc.) ***** EDU -- Equivalent Domestic Unit or 1 Family

SUPPLEMENTAL GROUP NO.: 614121. Water Rights Appurtenant to the following use(s):

91-1661(DIL), 1662(DIL), 1664(DIL), 1665(DIL), 1666(DIL),
1667(DIL), 1668(DIL), 1669(DIL), 1671(DIL), 1672(DIL),
1673(DIL), 1674(DIL), 1682(DIL), 1683(DIL), 1685(DIL),
1686(DIL), 1687(DIL), 1688(DIL), 1689(DIL), 1690(DIL),
1692(DIL), 1693(DIL), 1694(DIL), 1695(DIL), 1703(DIL),
1704(DIL), 1706(DIL), 1707(DIL), 1708(DIL), 1709(DIL),
3474(DIL), 3475(DIL), 3476(DIL), 3477(DIL), 3478(DIL),
3479(DIL), 3480(DIL), 3481(DIL), 3482(DIL), 3483(DIL),
3484(DIL), 3485(DIL), 3486(DIL), 3487(DIL), 3488(DIL),
3489(DIL), 3490(DIL), 3491(DIL), 3492(DIL), 3493(DIL),
3494(DIL), 3495(DIL), 3496(DIL), 3497(DIL), 3498(DIL)

STOCKWATER: Sole Supply: UNEVALUATED ELUS

Group Total: 1000.0000

Div Limit: 15.0 acft.

PERIOD OF USE: 01/01 TO 12/31

PLACE OF USE for STOCKWATERING*****

	NORTH-WEST¼	NORTH-EAST¼	SOUTH-WEST¼	SOUTH-EAST¼
	NW NE SW SE	NW NE SW SE	NW NE SW SE	NW NE SW SE
Sec 34 T 13S R 13E SLBM	* : : *	* : : X*	* : : *	* : : *

*****E N D O F D A T A*****

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(WARNING: Water Rights makes NO claims as to the accuracy of this data.) RUN DATE: 01/26/2011

WATER RIGHT: 91-1707

APPLICATION/CLAIM NO.:

CERT. NO.:

OWNERSHIP*****

NAME: W. Lavon & Marianne W. Day

ADDR: Castle Dale UT

REMARKS: joint tenants

DATES, ETC.*****

LAND OWNED BY APPLICANT? Yes

COUNTY TAX ID#:

FILED:	PRIORITY: 00/00/1869	PUB BEGAN:	PUB ENDED:	NEWSPAPER:
ProtestEnd:	PROTESTED: [No]	HEARING HLD:	SE ACTION: [	ActionDate:
EXTENSION:	ELEC/PROOF: [	ELEC/PROOF:	CERT/WUC: 12/08/1967	LAP, ETC:
RUSH LETTR:	RENOVATE:	RECON REQ:	TYPE: [	PROOF DUE:
PD BOOK: [91-5	MAP: [57	PUB DATE:		LAPS LETTER:

*TYPE -- DOCUMENT -- STATUS

Type of Right: Diligence Claim

Source of Info: Proposed Determination

Status:

LOCATION OF WATER RIGHT***(Points of Diversion: Click on Location to access PLAT Program.)*****MAP VIEWER*****

FLOW:

SOURCE: Left Fork Whitmore Canyon Creek

COUNTY: Carbon

COMMON DESCRIPTION:

POINT OF DIVERSION -- POINT TO POINT:

(1) Stockwatering directly on stream from a point at N 660 ft. W 660 ft. from S4 corner, Sec 35, T13S, R13E, SLBM,
to a point at N 660 ft. W 660 ft. from S4 corner, Sec 35, T13S, R13E, SLBM.

COMMENT: Administratively updated by State Engineer.

USES OF WATER RIGHT***** ELU -- Equivalent Livestock Unit (cow, horse, etc.) ***** EDU -- Equivalent Domestic Unit or 1 Family

SUPPLEMENTAL GROUP NO.: 614121. Water Rights Appurtenant to the following use(s):

91-1661(DIL), 1662(DIL), 1664(DIL), 1665(DIL), 1666(DIL),
1667(DIL), 1668(DIL), 1669(DIL), 1671(DIL), 1672(DIL),
1673(DIL), 1674(DIL), 1682(DIL), 1683(DIL), 1685(DIL),
1686(DIL), 1687(DIL), 1688(DIL), 1689(DIL), 1690(DIL),
1692(DIL), 1693(DIL), 1694(DIL), 1695(DIL), 1703(DIL),
1704(DIL), 1706(DIL), 1707(DIL), 1708(DIL), 1709(DIL),
3474(DIL), 3475(DIL), 3476(DIL), 3477(DIL), 3478(DIL),
3479(DIL), 3480(DIL), 3481(DIL), 3482(DIL), 3483(DIL),
3484(DIL), 3485(DIL), 3486(DIL), 3487(DIL), 3488(DIL),
3489(DIL), 3490(DIL), 3491(DIL), 3492(DIL), 3493(DIL),
3494(DIL), 3495(DIL), 3496(DIL), 3497(DIL), 3498(DIL)

STOCKWATER: Sole Supply: UNEVALUATED ELUs Group Total: 1000.0000 Div Limit: 15.0 acft. PERIOD OF USE: 01/01 TO 12/31

PLACE OF USE for STOCKWATERING*****

	NORTH-WEST¼	NORTH-EAST¼	SOUTH-WEST¼	SOUTH-EAST¼
	NW NE SW SE	NW NE SW SE	NW NE SW SE	NW NE SW SE
Sec 35 T 13S R 13E SLBM	* : : *	* : : *	* : : X*	* : : *

*****E N D O F D A T A*****

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Select Related Information

(WARNING: Water Rights makes NO claims as to the accuracy of this data.) RUN DATE: 01/26/2011

WATER RIGHT: 91-1708

APPLICATION/CLAIM NO.:

CERT. NO.:

OWNERSHIP*****

NAME: W. Lavon & Marianne W. Day

ADDR: Castle Dale UT

REMARKS: joint tenants

DATES, ETC.*****

LAND OWNED BY APPLICANT? Yes

COUNTY TAX ID#:

FILED:

PRIORITY: 00/00/1869|PUB BEGAN:

PUB ENDED:

NEWSPAPER:

ProtestEnd:

PROTESTED: [No]

HEARNG HLD:

SE ACTION: [

ActionDate:

PROOF DUE:

EXTENSION:

ELEC/PROOF:[

ELEC/PROOF:

CERT/WUC: 12/08/1967|LAP, ETC:

LAPS LETTER:

RUSH LETTR:

RENOVATE:

RECON REQ:

TYPE: [

PD BOOK: [91-5

MAP: [46

PUB DATE:

*TYPE -- DOCUMENT -- STATUS--

Type of Right: Diligence Claim

Source of Info: Proposed Determination

Status:

LOCATION OF WATER RIGHT***(Points of Diversion: Click on Location to access PLAT Program.)*****MAP VIEWER*****

FLOW:

SOURCE: Spring Stream

COUNTY: Carbon

COMMON DESCRIPTION:

POINT OF DIVERSION -- POINT TO POINT:

(1)Stockwatering directly on stream from a point at S 660 ft. W 660 ft. from NE corner, Sec 22, T13S, R13E, SLBM,
to a point at N 660 ft. W 660 ft. from E4 corner, Sec 34, T13S, R13E, SLBM.

COMMENT: Administratively updated by State Engineer.

SOURCE: Spring Stream

USES OF WATER RIGHT***** ELU -- Equivalent Livestock Unit (cow, horse, etc.) ***** EDU -- Equivalent Domestic Unit or 1 Family

SUPPLEMENTAL GROUP NO.: 614121. Water Rights Appurtenant to the following use(s):

91-1661(DIL), 1662(DIL), 1664(DIL), 1665(DIL), 1666(DIL)
1667(DIL), 1668(DIL), 1669(DIL), 1671(DIL), 1672(DIL)
1673(DIL), 1674(DIL), 1682(DIL), 1683(DIL), 1685(DIL)
1686(DIL), 1687(DIL), 1688(DIL), 1689(DIL), 1690(DIL)
1692(DIL), 1693(DIL), 1694(DIL), 1695(DIL), 1703(DIL)
1704(DIL), 1706(DIL), 1707(DIL), 1708(DIL), 1709(DIL)
3474(DIL), 3475(DIL), 3476(DIL), 3477(DIL), 3478(DIL)
3479(DIL), 3480(DIL), 3481(DIL), 3482(DIL), 3483(DIL)
3484(DIL), 3485(DIL), 3486(DIL), 3487(DIL), 3488(DIL)
3489(DIL), 3490(DIL), 3491(DIL), 3492(DIL), 3493(DIL)
3494(DIL), 3495(DIL), 3496(DIL), 3497(DIL), 3498(DIL)

STOCKWATER: Sole Supply: UNEVALUATED ELUS Group Total: 1000.0000 Div Limit: 15.0 acft. PERIOD OF USE: 01/01 TO 12/31

PLACE OF USE for STOCKWATERING*****

	NORTH-WEST¼ NW NE SW SE	NORTH-EAST¼ NW NE SW SE	SOUTH-WEST¼ NW NE SW SE	SOUTH-EAST¼ NW NE SW SE
Sec 22 T 13S R 13E SLBM	* : : : *	* : X : : *	* : : : *	* : : : *
Sec 34 T 13S R 13E SLBM	* : : : *	* : : : X*	* : : : *	* : : : *

*****END OF DATA*****

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Utah Division of Water Rights

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Select Related Information

(WARNING: Water Rights makes NO claims as to the accuracy of this data.) RUN DATE: 01/26/2011

WATER RIGHT: 91-1709

APPLICATION/CLAIM NO.:

CERT. NO.:

OWNERSHIP*****

NAME: W. Lavon & Marianne W. Day

ADDR: Castle Dale UT

REMARKS: joint tenants

DATES, ETC.*****

LAND OWNED BY APPLICANT? Yes

COUNTY TAX ID#:

FILED:

PRIORITY: 00/00/1869

PUB BEGAN:

PUB ENDED:

NEWSPAPER:

ProtestEnd:

PROTESTED: [No]

HEARNG HLD:

ISE ACTION: [

ActionDate:

PROOF DUE:

EXTENSION:

ELEC/PROOF: [

ELEC/PROOF:

CERT/WUC: 12/08/1967

LAP, ETC:

LAPS LETTER:

RUSH LETTR:

RENOVATE: [

RECON REQ:

TYPE: [

]

PD BOOK: [91-5

MAP: [57

PUB DATE:

*TYPE -- DOCUMENT -- STATUS--

Type of Right: Diligence Claim

Source of Info: Proposed Determination

Status:

LOCATION OF WATER RIGHT*** (Points of Diversion: Click on Location to access PLAT Program.)*****MAP VIEWER*****

FLOW: 0.011 cfs

SOURCE: Unnamed Spring

COUNTY: Carbon

COMMON DESCRIPTION:

POINT OF DIVERSION:

(1) Stockwatering directly on spring located at N 660 ft. W 660 ft. from E4 corner, Sec 34, T13S, R13E, SLBM.

COMMENT: Administratively updated by State Engineer.

USES OF WATER RIGHT***** ELU -- Equivalent Livestock Unit (cow, horse, etc.) ***** EDU -- Equivalent Domestic Unit or 1 Family

SUPPLEMENTAL GROUP NO.: 614121. Water Rights Appurtenant to the following use(s):

91-1661(DIL), 1662(DIL), 1664(DIL), 1665(DIL), 1666(DIL)1667(DIL), 1668(DIL), 1669(DIL), 1671(DIL), 1672(DIL)1673(DIL), 1674(DIL), 1682(DIL), 1683(DIL), 1685(DIL)1686(DIL), 1687(DIL), 1688(DIL), 1689(DIL), 1690(DIL)1692(DIL), 1693(DIL), 1694(DIL), 1695(DIL), 1703(DIL)1704(DIL), 1706(DIL), 1707(DIL), 1708(DIL), 1709(DIL)3474(DIL), 3475(DIL), 3476(DIL), 3477(DIL), 3478(DIL)3479(DIL), 3480(DIL), 3481(DIL), 3482(DIL), 3483(DIL)3484(DIL), 3485(DIL), 3486(DIL), 3487(DIL), 3488(DIL)3489(DIL), 3490(DIL), 3491(DIL), 3492(DIL), 3493(DIL)3494(DIL), 3495(DIL), 3496(DIL), 3497(DIL), 3498(DIL)

STOCKWATER: Sole Supply: UNEVALUATED ELUs Group Total: 1000.0000 Div Limit: 15.0 acft. PERIOD OF USE: 01/01 TO 12/31

PLACE OF USE for STOCKWATERING*****

NORTH-WEST¼

NORTH-EAST¼

SOUTH-WEST¼

SOUTH-EAST¼

NW NE SW SE

NW NE SW SE

NW NE SW SE

NW NE SW SE

Sec 34 T 13S R 13E SLBM

* : : *

* : : X*

* : : *

* : : *

*****E N D O F D A T A*****

Utah Division of Water Rights | 1594 West North Temple Suite 220, P.O. Box 146300, Salt Lake City, Utah 84114-6300 | 801-538-7240
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Utah Division of Water Rights

Select Related Information

(WARNING: Water Rights makes NO claims as to the accuracy of this data.) RUN DATE: 01/26/2011

WATER RIGHT: 91-1717 APPLICATION/CLAIM NO.: CERT. NO.:

OWNERSHIP*****

NAME: Ralph Stevenson
ADDR: P. O. Box 52
Wellington UT 84542
INTEREST: UNDV% REMARKS: joint tenants

NAME: Glen Wells
ADDR: P. O. Box 52
Wellington UT 84542
INTEREST: UNDV% REMARKS: joint tenants

DATES, ETC.*****

LAND OWNED BY APPLICANT? Yes COUNTY TAX ID#:
FILED: PRIORITY: 00/00/1869 PUB BEGAN: PUB ENDED: NEWSPAPER:
ProtestEnd: PROTESTED: [No] HEARING HLD: SE ACTION: [] ActionDate:
EXTENSION: ELEC/PROOF: [] ELEC/PROOF: CERT/WUC: 07/03/1967 LAP, ETC: PROOF DUE:
RUSH LETTR: RENOVATE: RECON REQ: TYPE: [] LAPS LETTER:
PD BOOK: [91-5] MAP: [57] PUB DATE:

*TYPE -- DOCUMENT -- STATUS--

Type of Right: Diligence Claim Source of Info: Proposed Determination Status:

LOCATION OF WATER RIGHT***(Points of Diversion: Click on Location to access PLAT Program.)*****MAP VIEWER*****

FLOW: SOURCE: Bear Canyon Spring Stream
COUNTY: Carbon COMMON DESCRIPTION:

POINT OF DIVERSION -- POINT TO POINT:

(1) Stockwatering directly on stream from a point at S 660 ft. E 1980 ft. from W4 corner, Sec 34, T13S, R13E, SLBM,
to a point at S 660 ft. E 660 ft. from NW corner, Sec 03, T14S, R13E, SLBM.
COMMENT: Administratively updated by State Engineer.

USES OF WATER RIGHT***** ELU -- Equivalent Livestock Unit (cow, horse, etc.) ***** EDU -- Equivalent Domestic Unit or 1 Family

SUPPLEMENTAL GROUP NO.: 614137. Water Rights Appurtenant to the following use(s):

91-1717(DIL), 1719(DIL), 1720(DIL), 1721(DIL), 1722(DIL),
1724(DIL), 1725(DIL), 1726(DIL), 3253(DIL)

STOCKWATER: Sole Supply: UNEVALUATED ELUs Group Total: 120.0000 Div Limit: 3.36 acft. PERIOD OF USE: 04/15 TO 10/31

SUPPLEMENTAL GROUP NO.: 615674. Water Rights Appurtenant to the following use(s):

91-1717(DIL), 1719(DIL), 1720(DIL), 1721(DIL), 1722(DIL),
1724(DIL), 1725(DIL), 1726(DIL), 3253(DIL), 4795(PAC),
4796(PAC), 4797(PAC), 4798(PAC)

STOCKWATER: Sole Supply: UNEVALUATED ELUs Group Total: 120.0000 Div Limit: PERIOD OF USE: 04/15 TO 10/31

PLACE OF USE for STOCKWATERING*****

	NORTH-WEST¼ NW NE SW SE	NORTH-EAST¼ NW NE SW SE	SOUTH-WEST¼ NW NE SW SE	SOUTH-EAST¼ NW NE SW SE
Sec 34 T 13S R 13E SLBM	* : : *	* : : *	* : X: : *	* : : *
Sec 03 T 14S R 13E SLBM	* X: : *	* : : *	* : : *	* : : *

*****E N D O F D A T A*****

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Utah Division of Water Rights

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Select Related Information

(WARNING: Water Rights makes NO claims as to the accuracy of this data.) RUN DATE: 01/26/2011

WATER RIGHT: 91-1720

APPLICATION/CLAIM NO.:

CERT. NO.:

OWNERSHIP*****

NAME: Ralph Stevenson

ADDR: P. O. box 52

Wellington UT 84542

INTEREST: UNDV% REMARKS: joint tenants

NAME: Glen Wells

ADDR: P. O. Box 52

Wellington UT 84542

INTEREST: UNDV% REMARKS: joint tenants

DATES, ETC.*****

LAND OWNED BY APPLICANT? Yes

COUNTY TAX ID#:

FILED:

PRIORITY: 00/00/1869

PUB BEGAN:

PUB ENDED:

NEWSPAPER:

ProtestEnd:

PROTESTED: [No]

HEARNG HLD:

SE ACTION: [

ActionDate:

PROOF DUE:

EXTENSION:

ELEC/PROOF: [

ELEC/PROOF:

CERT/WUC: 07/03/1967

LAP, ETC:

LAPS LETTER:

RUSH LETTR:

RENOVATE:

RECON REQ:

TYPE: [

]

PD BOOK: [91-5

MAP: [57

PUB DATE:

*TYPE -- DOCUMENT -- STATUS

Type of Right: Diligence Claim

Source of Info: Proposed Determination

Status:

LOCATION OF WATER RIGHT***(Points of Diversion: Click on Location to access PLAT Program.)*****MAP VIEWER*****

FLOW:

COUNTY: Carbon

COMMON DESCRIPTION:

SOURCE: Unnamed Stream

POINT OF DIVERSION -- POINT TO POINT:

(1) Stockwatering directly on stream from a point at S 660 ft. W 660 ft. from NE corner, Sec 33, T13S, R13E, SLBM,
to a point at S 660 ft. W 660 ft. from NE corner, Sec 33, T13S, R13E, SLBM.
COMMENT: Administratively updated by State Engineer.

USES OF WATER RIGHT***** ELU -- Equivalent Livestock Unit (cow, horse, etc.) ***** EDU -- Equivalent Domestic Unit or 1 Family

SUPPLEMENTAL GROUP NO.: 614137. Water Rights Appurtenant to the following use(s):

91-1717(DIL), 1719(DIL), 1720(DIL), 1721(DIL), 1722(DIL),
1724(DIL), 1725(DIL), 1726(DIL), 3253(DIL)

STOCKWATER: Sole Supply: UNEVALUATED ELUs Group Total: 120.0000 Div Limit: 3.36 acft. PERIOD OF USE: 04/15 TO 10/31

SUPPLEMENTAL GROUP NO.: 615674. Water Rights Appurtenant to the following use(s):

91-1717(DIL), 1719(DIL), 1720(DIL), 1721(DIL), 1722(DIL),
1724(DIL), 1725(DIL), 1726(DIL), 3253(DIL), 4795(PAC),
4796(PAC), 4797(PAC), 4798(PAC)

STOCKWATER: Sole Supply: UNEVALUATED ELUs Group Total: 120.0000 Div Limit: PERIOD OF USE: 04/15 TO 10/31

PLACE OF USE for STOCKWATERING*****

	NORTH-WEST¼	NORTH-EAST¼	SOUTH-WEST¼	SOUTH-EAST¼
Sec 33 T 13S R 13E SLBM	NW NE SW SE	NW NE SW SE	NW NE SW SE	NW NE SW SE
	* : : *	* : X: : *	* : : : *	* : : : *

*****END OF DATA*****

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Utah Division of Water Rights

Search

Select Related Information

(WARNING: Water Rights makes NO claims as to the accuracy of this data.) RUN DATE: 01/26/2011

WATER RIGHT: 91-1722 APPLICATION/CLAIM NO.: CERT. NO.:

OWNERSHIP*****

NAME: Ralph Stevenson
ADDR: P. O. Box 52
Wellington UT 84542
INTEREST: UNDV% REMARKS:

NAME: Glen Wells
ADDR: P. O. Box 52
Wellington UT 84542
INTEREST: UNDV% REMARKS:

DATES, ETC.*****

LAND OWNED BY APPLICANT? Yes COUNTY TAX ID#:
FILED: PRIORITY: 00/00/1869 PUB BEGAN: PUB ENDED: NEWSPAPER:
ProtestEnd: PROTESTED: [No] HEARING HLD: SE ACTION: [] ActionDate:
EXTENSION: ELEC/PROOF: [] ELEC/PROOF: CERT/WUC: 07/03/1967 LAP, ETC: PROOF DUE:
RUSH LETTR: RENOVATE: RECON REQ: TYPE: [] LAPS LETTER:
PD BOOK: [91-5] MAP: [57] PUB DATE:

*TYPE -- DOCUMENT -- STATUS--

Type of Right: Diligence Claim Source of Info: Proposed Determination Status:

LOCATION OF WATER RIGHT*** (Points of Diversion: Click on Location to access PLAT Program.)*****MAP VIEWER*****

FLOW:
COUNTY: Carbon COMMON DESCRIPTION: SOURCE: Bear Canyon Spring Stream

POINT OF DIVERSION -- POINT TO POINT:

(1) Stockwatering directly on stream from a point at S 660 ft. E 1980 ft. from W4 corner, Sec 34, T13S, R13E, SLBM,
to a point at S 660 ft. E 660 ft. from NW corner, Sec 03, T14S, R13E, SLBM.
COMMENT: Administratively updated by State Engineer.

USES OF WATER RIGHT***** ELU -- Equivalent Livestock Unit (cow, horse, etc.) ***** EDU -- Equivalent Domestic Unit or 1 Family

SUPPLEMENTAL GROUP NO.: 614137. Water Rights Appurtenant to the following use(s):

91-1717(DIL), 1719(DIL), 1720(DIL), 1721(DIL), 1722(DIL),
1724(DIL), 1725(DIL), 1726(DIL), 3253(DIL)

STOCKWATER: Sole Supply: UNEVALUATED ELUs Group Total: 120.0000 Div Limit: 3.36 acft. PERIOD OF USE: 04/15 TO 10/31

SUPPLEMENTAL GROUP NO.: 615674. Water Rights Appurtenant to the following use(s):

91-1717(DIL), 1719(DIL), 1720(DIL), 1721(DIL), 1722(DIL),
1724(DIL), 1725(DIL), 1726(DIL), 3253(DIL), 4795(PAC),
4796(PAC), 4797(PAC), 4798(PAC)

STOCKWATER: Sole Supply: UNEVALUATED ELUs Group Total: 120.0000 Div Limit: PERIOD OF USE: 04/15 TO 10/31

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Select Related Information

(WARNING: Water Rights makes NO claims as to the accuracy of this data.) RUN DATE: 01/26/2011

WATER RIGHT: 91-1725

APPLICATION/CLAIM NO.:

CERT. NO.:

OWNERSHIP*****

NAME: Ralph Stevenson
 ADDR: P. O. Box 52
 Wellington UT 84542
 INTEREST: UNDV# REMARKS:

NAME: Glen Wells
 ADDR: P. O. Box 52
 Wellington UT 84542
 INTEREST: UNDV# REMARKS:

DATES, ETC.*****

LAND OWNED BY APPLICANT? Yes

COUNTY TAX ID#:

FILED:	PRIORITY: 00/00/1869	PUB BEGAN:	PUB ENDED:	NEWSPAPER:
ProtestEnd:	PROTESTED: [No]	HEARNG HLD:	SE ACTION: [	ActionDate:
EXTENSION:	ELEC/PROOF: [	ELEC/PROOF:	CERT/WUC: 07/03/1967	LAP, ETC:
RUSH LETTR:	RENOVATE:	RECON REQ:	TYPE: [
PD BOOK: [91-5	MAP: [57	PUB DATE:		

*TYPE -- DOCUMENT -- STATUS--

Type of Right: Diligence Claim

Source of Info: Proposed Determination

Status:

LOCATION OF WATER RIGHT*** (Points of Diversion: Click on Location to access PLAT Program.)*****MAP VIEWER*****

FLOW:

SOURCE: Unnamed Stream

COUNTY: Carbon

COMMON DESCRIPTION:

POINT OF DIVERSION -- POINT TO POINT:

(1) Stockwatering directly on stream from a point at S 660 ft. W 660 ft. from NE corner, Sec 33, T13S, R13E, SLBM,
 to a point at S 660 ft. W 660 ft. from NE corner, Sec 33, T13S, R13E, SLBM.

COMMENT: Administratively updated by State Engineer.

USES OF WATER RIGHT***** ELU -- Equivalent Livestock Unit (cow, horse, etc.) ***** EDU -- Equivalent Domestic Unit or 1 Family

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 Select Related Information

(WARNING: Water Rights makes NO claims as to the accuracy of this data.) RUN DATE: 01/26/2011

WATER RIGHT: 91-2014

APPLICATION/CLAIM NO.:

CERT. NO.:

OWNERSHIP*****

NAME: Frank Liddell

ADDR: Post Office Box 106

Wellington UT 84542

INTEREST: 100%

REMARKS:

DATES, ETC.*****

LAND OWNED BY APPLICANT? Yes

COUNTY TAX ID#:

FILED:

PRIORITY: 00/00/1869|PUB BEGAN:

|PUB ENDED:

|NEWSPAPER:

ProtestEnd:

|PROTESTED: [No]

|HEARNG HLD:

|SE ACTION: []

|ActionDate:

|PROOF DUE:

EXTENSION:

|ELEC/PROOF: []

|ELEC/PROOF:

|CERT/WUC: 10/13/1965

|LAP, ETC:

|LAPS LETTER:

RUSH LETTR:

|RENOVATE:

|RECON REQ:

|TYPE: []

PD BOOK: [91-5]

|MAP: [57]

|PUB DATE:

*TYPE -- DOCUMENT -- STATUS--

Type of Right: Diligence Claim

Source of Info: Proposed Determination

Status:

LOCATION OF WATER RIGHT*** (Points of Diversion: Click on Location to access PLAT Program.)*****[MAP VIEWER](#)*****

FLOW: 0.011 cfs

SOURCE: Unnamed Spring

COUNTY: Carbon

COMMON DESCRIPTION:

POINT OF DIVERSION:

(1) Stockwatering directly on spring located at N 660 ft. W 660 ft. from S4 corner, Sec 01, T14S, R13E, SLBM.
COMMENT: Administratively updated by State Engineer.

USES OF WATER RIGHT***** ELU -- Equivalent Livestock Unit (cow, horse, etc.) ***** EDU -- Equivalent Domestic Unit or 1 Family



Online Services Agency List Business

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Select Related Information

(WARNING: Water Rights makes NO claims as to the accuracy of this data.) RUN DATE: 01/26/2011

WATER RIGHT: 91-2015

APPLICATION/CLAIM NO.:

CERT. NO.:

OWNERSHIP*****

NAME: Frank Liddell

ADDR: Post Office Box 106

Wellington UT 84542

INTEREST: 100%

REMARKS:

DATES, ETC.*****

LAND OWNED BY APPLICANT? Yes

COUNTY TAX ID#:

FILED:

PRIORITY: 00/00/1869

PUB BEGAN:

PUB ENDED:

NEWSPAPER:

ProtestEnd:

PROTESTED: [No]

HEARING HLD:

SE ACTION: [

ActionDate:

PROOF DUE:

EXTENSION:

ELEC/PROOF:[

ELEC/PROOF:

CERT/WUC: 10/13/1965

LAP, ETC:

LAPS LETTER:

RUSH LETTR:

RENOVATE:

RECON REQ:

TYPE: [

PD BOOK: [91-5

MAP: [57

PUB DATE:

*TYPE -- DOCUMENT -- STATUS--

Type of Right: Diligence Claim

Source of Info: Proposed Determination

Status:

LOCATION OF WATER RIGHT*** (Points of Diversion: Click on Location to access PLAT Program.)*****MAP VIEWER*****

FLOW: 0.011 cfs

SOURCE: Unnamed Spring

COUNTY: Carbon

COMMON DESCRIPTION:

POINT OF DIVERSION:

(1) Stockwatering directly on spring located at N 660 ft. W 660 ft. from S4 corner, Sec 01, T14S, R13E, SLBM.
COMMENT: Administratively updated by State Engineer.

USES OF WATER RIGHT***** ELU -- Equivalent Livestock Unit (cow, horse, etc.) ***** EDU -- Equivalent Domestic Unit or 1 Family

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Select Related Information

(WARNING: Water Rights makes NO claims as to the accuracy of this data.) RUN DATE: 01/26/2011

WATER RIGHT: 91-2016 APPLICATION/CLAIM NO.: CERT. NO.:

OWNERSHIP*****

NAME: Frank Liddell
ADDR: Post Office Box 106
Wellington UT 84542
INTEREST: 100% REMARKS:

DATES, ETC.*****

LAND OWNED BY APPLICANT? Yes COUNTY TAX ID#:
FILED: PRIORITY: 00/00/1869 PUB BEGAN: PUB ENDED: NEWSPAPER:
ProtestEnd: PROTESTED: [No] HEARNG HLD: SE ACTION: [] ActionDate: PROOF DUE:
EXTENSION: ELEC/PROOF: [] ELEC/PROOF: CERT/WUC: 10/13/1965 LAP, ETC: LAPS LETTER:
RUSH LETTR: RENOVATE: RECON REQ: TYPE: []
PD BOOK: [91-5] MAP: [57] PUB DATE:

*TYPE -- DOCUMENT -- STATUS

Type of Right: Diligence Claim Source of Info: Proposed Determination Status:

LOCATION OF WATER RIGHT*** (Points of Diversion: Click on Location to access PLAT Program.) *****MAP VIEWER*****

FLOW: 0.011 cfs SOURCE: Unnamed Spring
COUNTY: Carbon COMMON DESCRIPTION:

POINT OF DIVERSION:

(1) Stockwatering directly on spring located at N 660 ft. W 660 ft. from E4 corner, Sec 01, T14S, R13E, SLBM.
COMMENT: Administratively updated by State Engineer.

USES OF WATER RIGHT***** ELU -- Equivalent Livestock Unit (cow, horse, etc.) ***** EDU -- Equivalent Domestic Unit or 1 Family



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Select Related Information

(WARNING: Water Rights makes NO claims as to the accuracy of this data.) RUN DATE: 01/26/2011

WATER RIGHT: 91-2034

APPLICATION/CLAIM NO.:

CERT. NO.:

OWNERSHIP*****

NAME: Jay Pagano

ADDR: Wellington UT 84542

REMARKS: 55 elu's (supplemental)

DATES, ETC.*****

LAND OWNED BY APPLICANT? Yes

COUNTY TAX ID#:

FILED:

PRIORITY: /

PUB BEGAN:

PUB ENDED:

NEWSPAPER:

ProtestEnd:

PROTESTED: (No)

HEARNG HLD:

SE ACTION: [

ActionDate:

PROOF DUE:

EXTENSION:

ELEC/PROOF:[

ELEC/PROOF:

CERT/WUC: 10/15/1965

LAP, ETC:

LAPS LETTER:

RUSH LETTR:

RENOVATE:

RECON REQ:

TYPE: [

]

PD BOOK: [91-5

MAP: [57

PUB DATE:

*TYPE -- DOCUMENT -- STATUS--

Type of Right: Diligence Claim

Source of Info: Proposed Determination

Status:

LOCATION OF WATER RIGHT*** (Points of Diversion: Click on Location to access PLAT Program.)*****[MAP VIEWER](#)*****

FLOW: 0.011 cfs

SOURCE: Unnamed Spring

COUNTY: Carbon

COMMON DESCRIPTION:

POINT OF DIVERSION:

(1) Stockwatering directly on spring located at S 660 ft. E 660 ft. from W4 corner, Sec 35, T13S, R13E, SLBM.

COMMENT: Administratively updated by State Engineer.

USES OF WATER RIGHT***** ELU -- Equivalent Livestock Unit (cow, horse, etc.) ***** EDU -- Equivalent Domestic Unit or 1 Family*****

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Utah Division of Water Rights

Select Related Information

(WARNING: Water Rights makes NO claims as to the accuracy of this data.) RUN DATE: 01/26/2011

WATER RIGHT: 91-2035

APPLICATION/CLAIM NO.:

CERT. NO.:

OWNERSHIP*****

NAME: Jay Pagano

ADDR: Wellington UT 84542

REMARKS: 55 elu's (supplemental)

DATES, ETC.*****

LAND OWNED BY APPLICANT? Yes

COUNTY TAX ID#:

FILED:

PRIORITY: / /1869|PUB BEGAN:

|PUB ENDED:

|NEWSPAPER:

ProtestEnd:

|PROTESTED: [No]

|HEARNG HLD:

|SE ACTION: [

]|ActionDate:

|PROOF DUE:

EXTENSION:

|ELEC/PROOF: [

]|ELEC/PROOF:

|CERT/WUC: 10/15/1965|LAP, ETC:

|LAPS LETTER:

RUSH LETTR:

|RENOVATE:

|RECON REQ:

|TYPE: [

PD BOOK: [91-5

]|MAP: [57

]|PUB DATE:

*TYPE -- DOCUMENT -- STATUS--

Type of Right: Diligence Claim

Source of Info: Proposed Determination

Status:

LOCATION OF WATER RIGHT*** (Points of Diversion: Click on Location to access PLAT Program.)*****MAP VIEWER*****

FLOW: 0.011 cfs

SOURCE: Unnamed Spring

COUNTY: Carbon

COMMON DESCRIPTION:

POINT OF DIVERSION:

(1)Stockwatering directly on spring located at S 660 ft. W 660 ft. from E4 corner, Sec 35, T13S, R13E, SLBM.

COMMENT: Administratively updated by State Engineer.

USES OF WATER RIGHT***** ELU -- Equivalent Livestock Unit (cow, horse, etc.) ***** EDU -- Equivalent Domestic Unit or 1 Family

SUPPLEMENTAL GROUP NO.: 623387. Water Rights Appurtenant to the following use(s):

91-300(DIL), 302(DIL), 836(DIL), 2021(DIL), 2022(DIL),

2023(DIL), 2024(DIL), 2025(DIL), 2026(DIL), 2027(DIL),

2028(DIL), 2029(DIL), 2030(DIL), 2031(DIL), 2032(DIL),

2033(DIL), 2034(DIL), 2035(DIL), 2036(DIL), 2037(DIL),

2038(DIL), 2039(DIL), 2040(DIL), 2041(DIL)

STOCKWATER: Sole Supply: UNEVALUATED ELUS Group Total: 55.0000 Div Limit: PERIOD OF USE: 01/01 TO 12/31

SUPPLEMENTAL GROUP NO.: 623420.

91-2035(DIL)

STOCKWATER: Sole Supply: UNEVALUATED ELUS Group Total: 55.0000 Div Limit: PERIOD OF USE: 01/01 TO 12/31

PLACE OF USE for STOCKWATERING*****

	NORTH-WEST¼	NORTH-EAST¼	SOUTH-WEST¼	SOUTH-EAST¼
	NW NE SW SE	NW NE SW SE	NW NE SW SE	NW NE SW SE
Sec 35 T 13S R 13E SLBM	* : : *	* : : *	* : : *	* : X: : *

SEGREGATION HISTORY*****

This Right as originally filed:

FLOW IN

CFS

QUANTITY IN

ACRE-FEET

IRRIGATED

STOCK

WATER USES

DOMESTIC MUNICIPAL

MINING

POWER

OTHER

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Select Related Information

(WARNING: Water Rights makes NO claims as to the accuracy of this data.) RUN DATE: 01/26/2011

WATER RIGHT: 91-2036

APPLICATION/CLAIM NO.:

CERT. NO.:

OWNERSHIP*****

NAME: Jay Pagano

ADDR: Wellington UT 84542

REMARKS: 55 elu's (supplemental)

DATES, ETC.*****

LAND OWNED BY APPLICANT? Yes COUNTY TAX ID#:
 FILED: PRIORITY: / 1869 PUB BEGAN: PUB ENDED: NEWSPAPER:
 ProtestEnd: PROTESTED: [No] HEARING HLD: SE ACTION: [] ActionDate: PROOF DUE:
 EXTENSION: ELEC/PROOF: [] ELEC/PROOF: CERT/WUC: 10/15/1965 LAP, ETC: LAPS LETTER:
 RUSH LETTR: RENOVATE: RECON REQ: TYPE: []
 PD BOOK: [91-5] MAP: [57] PUB DATE:

*TYPE -- DOCUMENT -- STATUS--

Type of Right: Diligence Claim

Source of Info: Proposed Determination

Status:

LOCATION OF WATER RIGHT***(Points of Diversion: Click on Location to access PLAT Program.)*****MAP VIEWER*****

FLOW: 0.011 cfs

SOURCE: Unnamed Spring

COUNTY: Carbon

COMMON DESCRIPTION:

POINT OF DIVERSION:

(1) Stockwatering directly on spring located at N 660 ft. W 660 ft. from SE corner, Sec 35, T13S, R13E, SLBM.
 COMMENT: Administratively updated by State Engineer.

USES OF WATER RIGHT***** ELU -- Equivalent Livestock Unit (cow, horse, etc.) ***** EDU -- Equivalent Domestic Unit or 1 Family

SUPPLEMENTAL GROUP NO.: 623387. Water Rights Appurtenant to the following use(s):

91-300(DIL), 302(DIL), 836(DIL), 2021(DIL), 2022(DIL),
 2023(DIL), 2024(DIL), 2025(DIL), 2026(DIL), 2027(DIL),
 2028(DIL), 2029(DIL), 2030(DIL), 2031(DIL), 2032(DIL),
 2033(DIL), 2034(DIL), 2035(DIL), 2036(DIL), 2037(DIL),
 2038(DIL), 2039(DIL), 2040(DIL), 2041(DIL)

STOCKWATER: Sole Supply: UNEVALUATED ELUs Group Total: 55.0000 Div Limit: PERIOD OF USE: 01/01 TO 12/31

SUPPLEMENTAL GROUP NO.: 623422.

91-2036(DIL)

STOCKWATER: Sole Supply: UNEVALUATED ELUs Group Total: 55.0000 Div Limit: PERIOD OF USE: 01/01 TO 12/31

PLACE OF USE for STOCKWATERING*****

Sec 35 T 13S R 13E SLBM
 NORTH-WEST¼ NORTH-EAST¼ SOUTH-WEST¼ SOUTH-EAST¼
 NW NE SW SE NW NE SW SE NW NE SW SE NW NE SW SE
 * : : : * * : : : * * : : : * * : : : X*

SEGREGATION HISTORY*****

This Right as originally filed:

FLOW IN CFS	QUANTITY IN ACRE-FEET	IRRIGATED ACREAGE	STOCK (ELUs)	DOMESTIC (FAMILIES)	MUNICIPAL	MINING	POWER	OTHER
0.011 OR	13.44		480.0000					

The following Water Rights have been Segregated from 91-2036:

(1) WRNUM: 91-5130 11.88 425.0000
 APPL#: Hinkins, David P., Ross D., Todd S.
 FILED: 11/28/2006 STATUS: APP
 APPR:

CFS	ACRE-FEET	IRRIGATED ACREAGE	STOCK (ELUs)	DOMESTIC (FAMILIES)	MUNICIPAL	MINING	POWER	OTHER
0.011	1.56		55.0000					

91-2036 currently has: All ACRE-FEET has been SEGREGATED OFF.

*****E N D O F D A T A*****

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Select Related Information

(WARNING: Water Rights makes NO claims as to the accuracy of this data.) RUN DATE: 01/26/2011

WATER RIGHT: 91-2037

APPLICATION/CLAIM NO.:

CERT. NO.:

OWNERSHIP*****

NAME: Jay Pagano

ADDR: Wellington UT 84542

REMARKS: 55 elu's (supplemental)

DATES, ETC.*****

LAND OWNED BY APPLICANT? Yes	COUNTY TAX ID#:			
FILED:	PRIORITY: / 1869	PUB BEGAN:	PUB ENDED:	NEWSPAPER:
ProtestEnd:	PROTESTED: [No]	HEARNG HLD:	SE ACTION: [	ActionDate:
EXTENSION:	ELEC/PROOF: [	ELEC/PROOF:	CERT/WUC: 10/15/1965	LAP, ETC:
RUSH LETTR:	RENOVATE:	RECON REQ:	TYPE: [
PD BOOK: [91-5	MAP: [57	PUB DATE:		

*TYPE -- DOCUMENT -- STATUS--

Type of Right: Diligence Claim

Source of Info: Proposed Determination

Status:

LOCATION OF WATER RIGHT***(Points of Diversion: Click on Location to access PLAT Program.)*****MAP VIEWER*****

FLOW:

COUNTY: Carbon

COMMON DESCRIPTION:

SOURCE: Spring Canyon Creek

POINT OF DIVERSION -- POINT TO POINT:

(1) Stockwatering directly on stream from a point at S 660 ft. W 660 ft. from NE corner, Sec 35, T13S, R13E, SLBM, to a point at N 660 ft. W 660 ft. from E4 corner, Sec 35, T13S, R13E, SLBM.

COMMENT: Administratively updated by State Engineer.

USES OF WATER RIGHT***** ELU -- Equivalent Livestock Unit (cow, horse, etc.) ***** EDU -- Equivalent Domestic Unit or 1 Family

SUPPLEMENTAL GROUP NO.: 623387. Water Rights Appurtenant to the following use(s):

91-300(DIL), 302(DIL), 836(DIL), 2021(DIL), 2022(DIL),
2023(DIL), 2024(DIL), 2025(DIL), 2026(DIL), 2027(DIL),
2028(DIL), 2029(DIL), 2030(DIL), 2031(DIL), 2032(DIL),
2033(DIL), 2034(DIL), 2035(DIL), 2036(DIL), 2037(DIL),
2038(DIL), 2039(DIL), 2040(DIL), 2041(DIL)

STOCKWATER: Sole Supply: UNEVALUATED ELUs Group Total: 55.0000 Div Limit: PERIOD OF USE: 01/01 TO 12/31

SUPPLEMENTAL GROUP NO.: 623425.

91-2037(DIL)

STOCKWATER: Sole Supply: UNEVALUATED ELUs Group Total: 55.0000 Div Limit: PERIOD OF USE: 01/01 TO 12/31

PLACE OF USE for STOCKWATERING*****

	NORTH-WEST¼ NW NE SW SE	NORTH-EAST¼ NW NE SW SE	SOUTH-WEST¼ NW NE SW SE	SOUTH-EAST¼ NW NE SW SE
Sec 35 T 13S R 13E SLBM	* : : *	* : X : X*	* : : *	* : : *

SEGREGATION HISTORY*****

This Right as originally filed:

FLOW IN CFS	QUANTITY IN ACRE-FEET	IRRIGATED ACREAGE	STOCK (ELUs)	DOMESTIC (FAMILIES)	MUNICIPAL	MINING	POWER	OTHER
	13.44		480.0000					

The following Water Rights have been Segregated from 91-2037:

{ 1) WRNUM: 91-5131 11.88 425.0000
APPL#:
NAME: Hinkins, David P., Ross D., Todd S.
FILED: 11/28/2006 STATUS: APP
APPR:

CFS	ACRE-FEET	IRRIGATED ACREAGE	STOCK (ELUs)	DOMESTIC (FAMILIES)	MUNICIPAL	MINING	POWER	OTHER
91-2037 currently has:	1.56		55.0000					

All ACRE-FEET has been SEGREGATED OFF.

*****E N D O F D A T A*****

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(WARNING: Water Rights makes NO claims as to the accuracy of this data.) RUN DATE: 01/26/2011

WATER RIGHT: 91-2038

APPLICATION/CLAIM NO.:

CERT. NO.:

OWNERSHIP*****

NAME: Jay Pagano

ADDR: Wellington UT 84542

REMARKS: 55 elu's (supplemental)

DATES, ETC.*****

LAND OWNED BY APPLICANT? Yes

COUNTY TAX ID#:

FILED:

PRIORITY: / 1869

PUB BEGAN:

PUB ENDED:

NEWSPAPER:

ProtestEnd: |PROTESTED: [No]

|HEARNG HLD:

|SE ACTION: [

|ActionDate:

|PROOF DUE:

EXTENSION: |ELEC/PROOF: [

|ELEC/PROOF:

|CERT/WUC: 10/15/1965

|LAP, ETC:

|LAPS LETTER:

RUSH LETTR:

|RENOVATE:

|RECON REQ:

|TYPE: [

]

PD BOOK: [91-5

]|MAP: [58c

]|PUB DATE:

*TYPE -- DOCUMENT -- STATUS--

Type of Right: Diligence Claim

Source of Info: Proposed Determination

Status:

LOCATION OF WATER RIGHT*** (Points of Diversion: Click on Location to access PLAT Program.)*****MAP VIEWER*****

FLOW:

SOURCE: Grassy Trail Creek

COUNTY: Carbon

COMMON DESCRIPTION:

POINT OF DIVERSION -- POINT TO POINT:

(1) Stockwatering directly on stream from a point at S 660 ft. E 660 ft. from N4 corner, Sec 07, T14S, R14E, SLBM, to a point at S 660 ft. E 660 ft. from N4 corner, Sec 07, T14S, R14E, SLBM.
COMMENT: Administratively updated by State Engineer.

USES OF WATER RIGHT***** ELU -- Equivalent Livestock Unit (cow, horse, etc.) ***** EDU -- Equivalent Domestic Unit or 1 Family

SUPPLEMENTAL GROUP NO.: 623387. Water Rights Appurtenant to the following use(s):

91-300(DIL), 302(DIL), 836(DIL), 2021(DIL), 2022(DIL),
2023(DIL), 2024(DIL), 2025(DIL), 2026(DIL), 2027(DIL),
2028(DIL), 2029(DIL), 2030(DIL), 2031(DIL), 2032(DIL),
2033(DIL), 2034(DIL), 2035(DIL), 2036(DIL), 2037(DIL),
2038(DIL), 2039(DIL), 2040(DIL), 2041(DIL)

STOCKWATER: Sole Supply: UNEVALUATED ELUs

Group Total: 55.0000

Div Limit:

PERIOD OF USE: 01/01 TO 12/31

PLACE OF USE for STOCKWATERING*****

	NORTH-WEST¼ NW NE SW SE	NORTH-EAST¼ NW NE SW SE	SOUTH-WEST¼ NW NE SW SE	SOUTH-EAST¼ NW NE SW SE
Sec 07 T 14S R 14E SLBM	* : : *	* X : : *	* : : *	* : : *

SEGREGATION HISTORY*****

This Right as originally filed:

FLOW IN
CFSQUANTITY IN
ACRE-FEETIRRIGATED
ACREAGESTOCK
(ELUs)-----WATER USES-----
DOMESTIC MUNICIPAL MINING POWER OTHER
(FAMILIES) (*-----ACRE-FEET-----*)

13.44

480.0000

The following Water Rights have been Segregated from 91-2038:

(1) WRNUM: 91-5132 11.88 425.0000

APPL#:

NAME: Hinkins, David P., Ross D., Todd S.

FILED: 11/28/2006 STATUS: APP

APPR:

CFS

ACRE-FEET

IRRIGATED
ACREAGESTOCK
(ELUs)DOMESTIC MUNICIPAL MINING POWER OTHER
(FAMILIES) (*-----ACRE-FEET-----*)

91-2038 currently has:

1.56

55.0000

All ACRE-FEET has been SEGREGATED OFF.

*****E N D O F D A T A*****

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Utah Division of Water Rights

Select Related Information

(WARNING: Water Rights makes NO claims as to the accuracy of this data.) RUN DATE: 01/26/2011

WATER RIGHT: 91-2580

APPLICATION/CLAIM NO.:

CERT. NO.:

OWNERSHIP*****

NAME: Price Field Office USA Bureau of Land Management
ADDR: 125 South 600 West
Price UT 84501
INTEREST: 100% REMARKS:

DATES, ETC.*****

LAND OWNED BY APPLICANT? Yes COUNTY TAX ID#:
FILED: PRIORITY: 00/00/1869 PUB BEGAN: PUB ENDED: NEWSPAPER:
ProtestEnd: PROTESTED: (No) HEARING HLD: SE ACTION: [] ActionDate: PROOF DUE:
EXTENSION: ELEC/PROOF: [] ELEC/PROOF: CERT/WUC: LAP, ETC: LAPS LETTER:
RUSH LETTR: RENOVATE: RECON REQ: TYPE: []
PD BOOK: [91-5] MAP: [57] PUB DATE:

*TYPE -- DOCUMENT -- STATUS

Type of Right: Diligence Claim

Source of Info: Proposed Determination

Status:

LOCATION OF WATER RIGHT***(Points of Diversion: Click on Location to access PLAT Program.)*****MAP VIEWER*****

FLOW: 0.006 cfs

SOURCE: Bear Canyon Spring

COUNTY: Carbon

COMMON DESCRIPTION:

POINT OF DIVERSION:

(1) Stockwatering directly on spring located at S 660 ft. W 660 ft. from NE corner, Sec 09, T14S, R13E, S1E.
COMMENT: Administratively updated by State Engineer.

USES OF WATER RIGHT***** ELU -- Equivalent Livestock Unit (cow, horse, etc.) ***** EDU -- Equivalent Domestic Unit or 1 Family

SUPPLEMENTAL GROUP NO.: 614395. Water Rights Appurtenant to the following use(s):

91-2380 (DIL), 2580 (DIL), 2591 (DIL), 2606 (DIL), 2650 (DIL),
3158 (DIL), 3335 (DIL), 3540 (DIL), 3755 (DIL), 3756 (DIL)

STOCKWATER: Sole Supply: UNEVALUATED ELUS

Group Total: 140.0000

Div Limit:

PERIOD OF USE: 01/01 TO 12/31

Mud Springs Allotment

SUPPLEMENTAL GROUP NO.: 615265. Water Rights Appurtenant to the following use(s):

91-2380 (DIL), 2580 (DIL), 2591 (DIL), 2606 (DIL), 2650 (DIL),
3158 (DIL), 3335 (DIL), 3540 (DIL), 3755 (DIL), 3756 (DIL),
4393 (PAC), 4405 (PAC), 4424 (PAC), 4464 (PAC), 4465 (PAC),
4466 (PAC), 4467 (PAC), 4572 (PAC), 4573 (PAC), 4574 (PAC),
4575 (PAC), 4589 (PAC), 4638 (PAC), 4639 (PAC), 4658 (PAC),
4659 (PAC), 4660 (PAC), 4661 (PAC), 4786 (PAC), 4828 (CERT)

STOCKWATER: Sole Supply: UNEVALUATED ELUS

Group Total: 15.0000

Div Limit:

PERIOD OF USE: 01/01 TO 12/31

Mud Springs Allotment

SUPPLEMENTAL GROUP NO.: 615666. Water Rights Appurtenant to the following use(s):

91-2380 (DIL), 2580 (DIL), 2591 (DIL), 2606 (DIL), 2650 (DIL),
3158 (DIL), 3335 (DIL), 3540 (DIL), 3755 (DIL), 3756 (DIL),
4393 (PAC), 4405 (PAC), 4424 (PAC), 4464 (PAC), 4465 (PAC),
4466 (PAC), 4467 (PAC), 4572 (PAC), 4573 (PAC), 4574 (PAC),
4575 (PAC), 4589 (PAC), 4638 (PAC), 4639 (PAC), 4658 (PAC),
4659 (PAC), 4660 (PAC), 4661 (PAC), 4786 (PAC), 4787 (PAC),
4827 (CERT), 4828 (CERT)

STOCKWATER: Sole Supply: UNEVALUATED ELUS

Group Total: 15.0000

Div Limit:

PERIOD OF USE: 01/01 TO 12/31

Mud Springs Allotment

SUPPLEMENTAL GROUP NO.: 615699. Water Rights Appurtenant to the following use(s):

91-2380 (DIL), 2580 (DIL), 2591 (DIL), 2606 (DIL), 2650 (DIL),
3158 (DIL), 3335 (DIL), 3540 (DIL), 3755 (DIL), 3756 (DIL),
4393 (PAC), 4405 (PAC), 4424 (PAC), 4464 (PAC), 4465 (PAC),
4466 (PAC), 4467 (PAC), 4572 (PAC), 4573 (PAC), 4574 (PAC),
4575 (PAC), 4589 (PAC), 4638 (PAC), 4639 (PAC), 4658 (PAC),
4659 (PAC), 4660 (PAC), 4661 (PAC), 4786 (PAC), 4827 (CERT),
4828 (CERT)

STOCKWATER: Sole Supply: UNEVALUATED ELUS

Group Total: 315.0000

Div Limit:

PERIOD OF USE: 01/01 TO 12/31

Mud Springs Allotment

SUPPLEMENTAL GROUP NO.: 615700. Water Rights Appurtenant to the following use(s):

91-2380 (DIL), 2580 (DIL), 2591 (DIL), 2606 (DIL), 2650 (DIL),
3158 (DIL), 3335 (DIL), 3540 (DIL), 3755 (DIL), 3756 (DIL),
4828 (CERT)

STOCKWATER: Sole Supply: UNEVALUATED ELUS

Group Total: 57.0000

Div Limit:

PERIOD OF USE: 01/01 TO 12/31

Mud Springs Allotment. Stockwater limited 7.5 months/year.

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(WARNING: Water Rights makes NO claims as to the accuracy of this data.) RUN DATE: 01/26/2011

WATER RIGHT: 91-3158

APPLICATION/CLAIM NO.:

CERT. NO.:

OWNERSHIP*****

NAME: Price Field Office USA Bureau of Land Management

ADDR: 125 South 600 West

Price UT 84501

INTEREST: 100%

REMARKS:

DATES, ETC.*****

LAND OWNED BY APPLICANT? Yes

COUNTY TAX ID#:

FILED:

PRIORITY: 00/00/1869|PUB BEGAN:

|PUB ENDED:

|NEWSPAPER:

ProtestEnd:

|PROTESTED: [No]

|HEARING HLD:

|SE ACTION: [

|ActionDate:

|PROOF DUE:

EXTENSION:

|ELEC/PROOF:[

|ELEC/PROOF:

|CERT/WUC:

|LAP, ETC:

|LAPS LETTER:

RUSH LETTR:

|RENOVATE:

|RECON REQ:

|TYPE: [

]

PD BOOK: [91-5

|MAP: [57

|PUB DATE:

*TYPE -- DOCUMENT -- STATUS--

Type of Right: Diligence Claim

Source of Info: Proposed Determination

Status:

LOCATION OF WATER RIGHT***(Points of Diversion: Click on Location to access PLAT Program.)*****MAP VIEWER*****

FLOW:

SOURCE: Left Fork Grassy Trail Creek

COUNTY: Carbon

COMMON DESCRIPTION:

POINT OF DIVERSION -- POINT TO POINT:

(1)Stockwatering directly on stream from a point at S 660 ft. E 660 ft. from N4 corner, Sec 02, T14S, R13E, SLBM,
to a point at N 660 ft. W 660 ft. from SE corner, Sec 01, T14S, R13E, SLBM.

COMMENT: Administratively updated by State Engineer.

USES OF WATER RIGHT***** ELU -- Equivalent Livestock Unit (cow, horse, etc.) ***** EDU -- Equivalent Domestic Unit or 1 Family

SUPPLEMENTAL GROUP NO.: 614395. Water Rights Appurtenant to the following use(s):

91-2380(DIL), 2580(DIL), 2591(DIL), 2606(DIL), 2650(DIL)

3158(DIL), 3335(DIL), 3540(DIL), 3755(DIL), 3756(DIL)

STOCKWATER: Sole Supply: UNEVALUATED ELUs

Group Total: 140.0000

Div Limit:

PERIOD OF USE: 01/01 TO 12/31

Mud Springs Allotment

SUPPLEMENTAL GROUP NO.: 615265. Water Rights Appurtenant to the following use(s):

91-2380(DIL), 2580(DIL), 2591(DIL), 2606(DIL), 2650(DIL)

3158(DIL), 3335(DIL), 3540(DIL), 3755(DIL), 3756(DIL)

4393(PAC), 4405(PAC), 4424(PAC), 4464(PAC), 4465(PAC)

4466(PAC), 4467(PAC), 4572(PAC), 4573(PAC), 4574(PAC)

4575(PAC), 4589(PAC), 4638(PAC), 4639(PAC), 4658(PAC)

4659(PAC), 4660(PAC), 4661(PAC), 4786(PAC), 4828(CERT)

STOCKWATER: Sole Supply: UNEVALUATED ELUs

Group Total: 15.0000

Div Limit:

PERIOD OF USE: 01/01 TO 12/31

Mud Springs Allotment

SUPPLEMENTAL GROUP NO.: 615666. Water Rights Appurtenant to the following use(s):

91-2380(DIL), 2580(DIL), 2591(DIL), 2606(DIL), 2650(DIL)

3158(DIL), 3335(DIL), 3540(DIL), 3755(DIL), 3756(DIL)

4393(PAC), 4405(PAC), 4424(PAC), 4464(PAC), 4465(PAC)

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(WARNING: Water Rights makes NO claims as to the accuracy of this data.) RUN DATE: 01/26/2011

WATER RIGHT: 91-3266

APPLICATION/CLAIM NO.:

CERT. NO.:

OWNERSHIP*****

NAME: George Orfanakis

ADDR: Price UT 84501

INTEREST: 100%

REMARKS:

DATES, ETC.*****

LAND OWNED BY APPLICANT? Yes

COUNTY TAX ID#:

FILED:

PRIORITY: 00/00/1902

PUB BEGAN:

PUB ENDED:

NEWSPAPER:

ProtestEnd:

PROTESTED: (No

HEARING HLD:

SE ACTION: [

ActionDate:

PROOF DUE:

EXTENSION:

ELEC/PROOF:[

ELEC/PROOF:

CERT/WUC: 07/19/1967

LAP, ETC:

LAPS LETTER:

RUSH LETTR:

RENOVATE:

RECON REQ:

TYPE: [

PUB DATE:

PD BOOK: [91-5

MAP: [68

PUB DATE:

*TYPE -- DOCUMENT -- STATUS

Type of Right: Diligence Claim

Source of Info: Proposed Determination

Status:

LOCATION OF WATER RIGHT** (Points of Diversion: Click on Location to access PLAT Program.)*****MAP VIEWER*****

FLOW:

SOURCE: Unnamed Stream

COUNTY: Carbon

COMMON DESCRIPTION:

POINT OF DIVERSION:

(1) Stockwatering directly on reservoir located at N 660 ft. E 660 ft. from S4 corner, Sec 24, T14S, R13E, SLBM.

COMMENT: Administratively updated by State Engineer.

USES OF WATER RIGHT***** ELU -- Equivalent Livestock Unit (cow, horse, etc.) ***** EDU -- Equivalent Domestic Unit or 1 Family

SUPPLEMENTAL GROUP NO.: 614145. Water Rights Appurtenant to the following use(s):

91-485 (DIL), 1752 (DIL), 2765 (DIL), 3266 (DIL)

STOCKWATER: Sole Supply: UNEVALUATED ELUs Group Total: 620.0000 Div Limit: 17.36 acft. PERIOD OF USE: 01/01 TO 12/31

PLACE OF USE for STOCKWATERING*****

	NORTH-WEST¼	NORTH-EAST¼	SOUTH-WEST¼	SOUTH-EAST¼
	NW NE SW SE	NW NE SW SE	NW NE SW SE	NW NE SW SE
Sec 24 T 14S R 13E SLBM	* : : : *	* : : : *	* : : : *	* : : X: *

Storage from 01/01 to 12/31, inclusive, in Unnamed Reservoir with a maximum capacity of 0.250 acre-feet, located in:

	NORTH-WEST¼	NORTH-EAST¼	SOUTH-WEST¼	SOUTH-EAST¼
	NW NE SW SE	NW NE SW SE	NW NE SW SE	NW NE SW SE
Area Inundated:	* : : : *	* : : : *	* : : : *	* : : X: *
Sec 24 T 14S R 13E SLBM	* : : : *	* : : : *	* : : : *	* : : X: *

Small Dam Required?: No

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Select Related Information

(WARNING: Water Rights makes NO claims as to the accuracy of this data.) RUN DATE: 01/26/2011

WATER RIGHT: 91-3474 APPLICATION/CLAIM NO.: CERT. NO.:

OWNERSHIP*****

NAME: W. Lavon & Marianne W. Day
ADDR: Castle Dale UT

REMARKS: joint tenants

DATES, ETC.*****

LAND OWNED BY APPLICANT? Yes COUNTY TAX ID#:

FILED: PRIORITY: 00/00/1869|PUB BEGAN: |PUB ENDED: |NEWSPAPER:
ProtestEnd: |PROTESTED: [No] |HEARNG HLD: |SE ACTION: { |ActionDate: |PROOF DUE:
EXTENSION: |ELEC/PROOF: { |ELEC/PROOF: |CERT/WUC: 01/02/1968|LAP, ETC: |LAPS LETTER:
RUSH LETTR: |RENOVATE: |RECON REQ: |TYPE: {
PD BOOK: [91-5] |MAP: [57] |PUB DATE:

*TYPE -- DOCUMENT -- STATUS--

Type of Right: Diligence Claim Source of Info: Proposed Determination Status:

LOCATION OF WATER RIGHT*** (Points of Diversion: Click on Location to access PLAT Program.)*****MAP VIEWER*****

FLOW: 0.011 cfs SOURCE: Unnamed Spring
COUNTY: Carbon COMMON DESCRIPTION:

POINT OF DIVERSION:

(1)Stockwatering directly on spring located at N 660 ft. W 660 ft. from SE corner, Sec 34, T13S, R13E, SLBM.
COMMENT: Administratively updated by State Engineer.

USES OF WATER RIGHT***** ELU -- Equivalent Livestock Unit (cow, horse, etc.) ***** EDU -- Equivalent Domestic Unit or 1 Family

SUPPLEMENTAL GROUP NO.: 614121. Water Rights Appurtenant to the following use(s):

91-1661(DIL), 1662(DIL), 1664(DIL), 1665(DIL), 1666(DIL)
1667(DIL), 1668(DIL), 1669(DIL), 1671(DIL), 1672(DIL)
1673(DIL), 1674(DIL), 1682(DIL), 1683(DIL), 1685(DIL)
1686(DIL), 1687(DIL), 1688(DIL), 1689(DIL), 1690(DIL)
1692(DIL), 1693(DIL), 1694(DIL), 1695(DIL), 1703(DIL)
1704(DIL), 1706(DIL), 1707(DIL), 1708(DIL), 1709(DIL)
3474(DIL), 3475(DIL), 3476(DIL), 3477(DIL), 3478(DIL)
3479(DIL), 3480(DIL), 3481(DIL), 3482(DIL), 3483(DIL)
3484(DIL), 3485(DIL), 3486(DIL), 3487(DIL), 3488(DIL)
3489(DIL), 3490(DIL), 3491(DIL), 3492(DIL), 3493(DIL)
3494(DIL), 3495(DIL), 3496(DIL), 3497(DIL), 3498(DIL)

STOCKWATER: Sole Supply: UNEVALUATED ELUs Group Total: 1000.0000 Div Limit: 15.0 acft. PERIOD OF USE: 01/01 TO 12/31

PLACE OF USE for STOCKWATERING*****

	NORTH-WEST¼	NORTH-EAST¼	SOUTH-WEST¼	SOUTH-EAST¼
	NW NE SW SE	NW NE SW SE	NW NE SW SE	NW NE SW SE
Sec 34 T 13S R 13E SLBM	* : : *	* : : *	* : : *	* : : X*

OTHER COMMENTS*****

1/16 Interest

*****END OF DATA*****

utah.gov Online Services Agency List Business

Utah Division of Water Rights

Search

Select Related Information

(WARNING: Water Rights makes NO claims as to the accuracy of this data.) RUN DATE: 01/26/2011

WATER RIGHT: 91-3475

APPLICATION/CLAIM NO.:

CERT. NO.:

OWNERSHIP*****

NAME: W. Lavon & Marianne W. Day

ADDR: Castle Dale UT

REMARKS: joint tenants

DATES, ETC.*****

LAND OWNED BY APPLICANT? Yes

COUNTY TAX ID#:

FILED:

PRIORITY: 00/00/1869

PUB BEGAN:

PUB ENDED:

NEWSPAPER:

ProtestEnd:

PROTESTED: [No]

HEARNG HLD:

SE ACTION: [

ActionDate:

PROOF DUE:

EXTENSION:

ELEC/PROOF: [

ELEC/PROOF:

CERT/WUC: 05/28/1968

LAP, ETC:

LAPS LETTER:

RUSH LETTR:

RENOVATE:

RECON REQ:

TYPE: [

]

PD BOOK: [91-5

MAP: [57

PUB DATE:

*TYPE -- DOCUMENT -- STATUS

Type of Right: Diligence Claim

Source of Info: Proposed Determination

Status:

LOCATION OF WATER RIGHT***(Points of Diversion: Click on Location to access PLAT Program.)*****MAP VIEWER*****

FLOW: 0.011 cfs

SOURCE: Unnamed Spring

COUNTY: Carbon

COMMON DESCRIPTION:

POINT OF DIVERSION:

(1) Stockwatering directly on spring located at N 660 ft. W 660 ft. from SE corner, Sec 34, T13S, R13E, SLBM.

COMMENT: Administratively updated by State Engineer.

USES OF WATER RIGHT***** ELU -- Equivalent Livestock Unit (cow, horse, etc.) ***** EDU -- Equivalent Domestic Unit or 1 Family

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Utah Division of Water Rights

Search

Select Related Information

(WARNING: Water Rights makes NO claims as to the accuracy of this data.) RUN DATE: 01/26/2011

WATER RIGHT: 91-3476

APPLICATION/CLAIM NO.:

CERT. NO.:

OWNERSHIP*****

NAME: W. Lavon & Marianne W. Day

ADDR: Castle Dale UT

REMARKS: joint tenants

DATES, ETC.*****

LAND OWNED BY APPLICANT? Yes

COUNTY TAX ID#:

FILED:

PRIORITY: 00/00/1869|PUB BEGAN:

PUB ENDED:

NEWSPAPER:

ProtestEnd:

|PROTESTED: [No]

|HEARING HLD:

|SE ACTION: [

]|ActionDate:

|PROOF DUE:

EXTENSION:

|ELEC/PROOF: [

]|ELEC/PROOF:

|CERT/WUC: 02/19/1968|LAP, ETC:

|LAPS LETTER:

RUSH LETTR:

|RENOVATE:

|RECON REQ:

|TYPE: [

]

PD BOOK: [91-5

]|MAP: [57

]|PUB DATE:

*TYPE -- DOCUMENT -- STATUS--

Type of Right: Diligence Claim

Source of Info: Proposed Determination

Status:

LOCATION OF WATER RIGHT*** (Points of Diversion: Click on Location to access PLAT Program.)*****MAP VIEWER*****

FLOW: 0.011 cfs

SOURCE: Unnamed Spring

COUNTY: Carbon

COMMON DESCRIPTION:

POINT OF DIVERSION:

(1) Stockwatering directly on spring located at N 660 ft. W 660 ft. from SE corner, Sec 34, T13S, R13E, SLBM.

COMMENT: Administratively updated by State Engineer.

USES OF WATER RIGHT***** ELU -- Equivalent Livestock Unit (cow, horse, etc.) ***** EDU -- Equivalent Domestic Unit or 1 Family

SUPPLEMENTAL GROUP NO.: 614121. Water Rights Appurtenant to the following use(s):

91-1661(DIL), 1662(DIL), 1664(DIL), 1665(DIL), 1666(DIL)
1667(DIL), 1668(DIL), 1669(DIL), 1671(DIL), 1672(DIL)
1673(DIL), 1674(DIL), 1682(DIL), 1683(DIL), 1685(DIL)
1686(DIL), 1687(DIL), 1688(DIL), 1689(DIL), 1690(DIL)
1692(DIL), 1693(DIL), 1694(DIL), 1695(DIL), 1703(DIL)
1704(DIL), 1706(DIL), 1707(DIL), 1708(DIL), 1709(DIL)
3474(DIL), 3475(DIL), 3476(DIL), 3477(DIL), 3478(DIL)
3479(DIL), 3480(DIL), 3481(DIL), 3482(DIL), 3483(DIL)
3484(DIL), 3485(DIL), 3486(DIL), 3487(DIL), 3488(DIL)
3489(DIL), 3490(DIL), 3491(DIL), 3492(DIL), 3493(DIL)
3494(DIL), 3495(DIL), 3496(DIL), 3497(DIL), 3498(DIL)

STOCKWATER: Sole Supply: UNEVALUATED ELUs

Group Total: 1000.0000

Div Limit: 15.0 acft.

PERIOD OF USE: 01/01 TO 12/31

PLACE OF USE for STOCKWATERING*****

	NORTH-WEST¼	NORTH-EAST¼	SOUTH-WEST¼	SOUTH-EAST¼
	NW NE SW SE	NW NE SW SE	NW NE SW SE	NW NE SW SE
Sec 34 T 13S R 13E SLBM	* : : *	* : : *	* : : *	* : : X*

OTHER COMMENTS*****

3/8 Interest.

*****E N D O F D A T A*****



Online Services Agency List Business

Utah Division of Water Rights

Search



Select Related Information

(WARNING: Water Rights makes NO claims as to the accuracy of this data.) RUN DATE: 01/26/2011

WATER RIGHT: 91-3477 APPLICATION/CLAIM NO.: CERT. NO.:

OWNERSHIP*****

NAME: W. Lavon & Marianne W. Day

ADDR: Castle Dale UT

REMARKS: joint tenants

DATES, ETC.*****

LAND OWNED BY APPLICANT? Yes COUNTY TAX ID#:
FILED: PRIORITY: 00/00/1869 PUB BEGAN: PUB ENDED: NEWSPAPER:
ProtestEnd: PROTESTED: [No] HEARING HLD: SE ACTION: [] ActionDate: PROOF DUE:
EXTENSION: ELEC/PROOF: [] ELEC/PROOF: CERT/WUC: 01/02/1968 LAP, ETC: LAPS LETTER:
RUSH LETTR: RENOVATE: RECON REQ: I TYPE: []
PD BOOK: [91-5] MAP: [57] PUB DATE:

*TYPE -- DOCUMENT -- STATUS--

Type of Right: Diligence Claim Source of Info: Proposed Determination Status:

LOCATION OF WATER RIGHT***(Points of Diversion: Click on Location to access PLAT Program.)*****MAP VIEWER*****

FLOW: 0.011 cfs

SOURCE: Unnamed Spring

COUNTY: Carbon COMMON DESCRIPTION:

POINT OF DIVERSION:

(1) Stockwatering directly on spring located at N 660 ft. W 660 ft. from SE corner, Sec 34, T13S, R13E, SLBM.
COMMENT: Administratively updated by State Engineer.

USES OF WATER RIGHT***** ELU -- Equivalent Livestock Unit (cow, horse, etc.) ***** EDU -- Equivalent Domestic Unit or 1 Family

SUPPLEMENTAL GROUP NO.: 614121. Water Rights Appurtenant to the following use(s):

91-1661(DIL), 1662(DIL), 1664(DIL), 1665(DIL), 1666(DIL),
1667(DIL), 1668(DIL), 1669(DIL), 1671(DIL), 1672(DIL),
1673(DIL), 1674(DIL), 1682(DIL), 1683(DIL), 1685(DIL),
1686(DIL), 1687(DIL), 1688(DIL), 1689(DIL), 1690(DIL),
1692(DIL), 1693(DIL), 1694(DIL), 1695(DIL), 1703(DIL),
1704(DIL), 1706(DIL), 1707(DIL), 1708(DIL), 1709(DIL),
3474(DIL), 3475(DIL), 3476(DIL), 3477(DIL), 3478(DIL),
3479(DIL), 3480(DIL), 3481(DIL), 3482(DIL), 3483(DIL),
3484(DIL), 3485(DIL), 3486(DIL), 3487(DIL), 3488(DIL),
3489(DIL), 3490(DIL), 3491(DIL), 3492(DIL), 3493(DIL),
3494(DIL), 3495(DIL), 3496(DIL), 3497(DIL), 3498(DIL)

STOCKWATER: Sole Supply: UNEVALUATED ELUs Group Total: 1000.0000 Div Limit: 15.0 acft. PERIOD OF USE: 01/01 TO 12/31

PLACE OF USE for STOCKWATERING*****

	NORTH-WEST¼	NORTH-EAST¼	SOUTH-WEST¼	SOUTH-EAST¼
	NW NE SW SE	NW NE SW SE	NW NE SW SE	NW NE SW SE
Sec 34 T 13S R 13E SLBM	* : : : *	* : : : *	* : : : *	* : : : X*

OTHER COMMENTS*****

11/48 Interest.

*****END OF DATA*****

utah.gov Online Services Agency List Business

Search

Utah Division of Water Rights

Select Related Information

(WARNING: Water Rights makes NO claims as to the accuracy of this data.) RUN DATE: 01/26/2011

WATER RIGHT: 91-3478 APPLICATION/CLAIM NO.: CERT. NO.:

OWNERSHIP*****

NAME: W. Lavon & Marianne W. Day
ADDR: Castle Dale UT

REMARKS: joint tenants

DATES, ETC.*****

LAND OWNED BY APPLICANT? Yes	COUNTY TAX ID#:		
FILED:	PRIORITY: 00/00/1869	PUB BEGAN:	PUB ENDED:
ProtestEnd:	PROTESTED: [No]	HEARING HLD:	NEWSPAPER:
EXTENSION:	ELEC/PROOF: []	ELEC/PROOF:	SE ACTION: []
RUSH LETTR:	RENOVATE:	RECON REQ:	CERT/WUC: 03/08/1972
PD BOOK: [91-5]	IMAP: [57]	PUB DATE:	LAP, ETC:
*TYPE -- DOCUMENT -- STATUS--		PROOF DUE:	
Type of Right: Diligence Claim		LAPS LETTER:	

Source of Info: Proposed Determination Status:

LOCATION OF WATER RIGHT***(Points of Diversion: Click on Location to access PLAT Program.)*****MAP VIEWER*****

FLOW: 0.011 cfs
COUNTY: Carbon COMMON DESCRIPTION: SOURCE: Unnamed Spring

POINT OF DIVERSION:

(1) Stockwatering directly on spring located at N 660 ft. W 660 ft. from SE corner, Sec 34, T13S, R13E, SLBM.
COMMENT: Administratively updated by State Engineer.

USES OF WATER RIGHT***** ELU -- Equivalent Livestock Unit (cow, horse, etc.) ***** EDU -- Equivalent Domestic Unit or 1 Family

SUPPLEMENTAL GROUP NO.: 614121. Water Rights Appurtenant to the following use(s):

91-1661(DIL), 1662(DIL), 1664(DIL), 1665(DIL), 1666(DIL),
1667(DIL), 1668(DIL), 1669(DIL), 1671(DIL), 1672(DIL),
1673(DIL), 1674(DIL), 1682(DIL), 1683(DIL), 1685(DIL),
1686(DIL), 1687(DIL), 1688(DIL), 1689(DIL), 1690(DIL),
1692(DIL), 1693(DIL), 1694(DIL), 1695(DIL), 1703(DIL),
1704(DIL), 1706(DIL), 1707(DIL), 1708(DIL), 1709(DIL),
3474(DIL), 3475(DIL), 3476(DIL), 3477(DIL), 3478(DIL),
3479(DIL), 3480(DIL), 3481(DIL), 3482(DIL), 3483(DIL),
3484(DIL), 3485(DIL), 3486(DIL), 3487(DIL), 3488(DIL),
3489(DIL), 3490(DIL), 3491(DIL), 3492(DIL), 3493(DIL),
3494(DIL), 3495(DIL), 3496(DIL), 3497(DIL), 3498(DIL)

STOCKWATER: Sole Supply: UNEVALUATED ELUs Group Total: 1000.0000 Div Limit: 15.0 acft. PERIOD OF USE: 01/01 TO 12/31

PLACE OF USE for STOCKWATERING*****

	NORTH-WEST¼	NORTH-EAST¼	SOUTH-WEST¼	SOUTH-EAST¼
	NW NE SW SE	NW NE SW SE	NW NE SW SE	NW NE SW SE
Sec 34 T 13S R 13E SLBM	* : : : *	* : : : *	* : : : *	* : : : X*

OTHER COMMENTS*****

7/24 Interest.

*****END OF DATA*****

Utah Division of Water Rights

Select Related Information

(WARNING: Water Rights makes NO claims as to the accuracy of this data.) RUN DATE: 01/26/2011

WATER RIGHT: **91-3479** APPLICATION/CLAIM NO.: CERT. NO.:

OWNERSHIP*****

NAME: W. Lavon & Marianne W. Day
ADDR: Castle Dale UT

REMARKS: joint tenants

 DATES, ETC.*****

LAND OWNED BY APPLICANT? Yes		COUNTY TAX ID#:			
FILED:	|PRIORITY: 00/00/1869|	PUB BEGAN:	|PUB ENDED:	|NEWSPAPER:	
ProtestEnd:	|PROTESTED: [No]	|HEARING HLD:	|SE ACTION: [	|ActionDate:	|PROOF DUE:
EXTENSION:	|ELEC/PROOF: [	|ELEC/PROOF:	|CERT/WUC: 01/02/1968|	LAP, ETC:	|LAPS LETTER:
RUSH LETTER:	|RENOVATE:	|RECON REQ:	|TYPE: [
PD BOOK: [91-5	]MAP: [57	]PUB DATE:			

*TYPE -- DOCUMENT -- STATUS

Type of Right: Diligence Claim

Source of Info: Proposed Determination

Status:

LOCATION OF WATER RIGHT** (Points of Diversion: Click on Location to access PLAT Program.) *****MAP VIEWER*****

FLOW: 0.011 cfs
COUNTY: Carbon COMMON DESCRIPTION: SOURCE: Unnamed Spring

POINT OF DIVERSION:

{ 1) Stockwatering directly on spring located at S 660 ft. W 660 ft. from E4 corner, Sec 34, T13S, R13E, SLBM.
COMMENT: Administratively updated by State Engineer.

=====

USES OF WATER RIGHT***** ELU -- Equivalent Livestock Unit (cow, horse, etc.) ***** EDU -- Equivalent Domestic Unit or 1 Family

=====

SUPPLEMENTAL GROUP NO.: 614121. Water Rights Appurtenant to the following use(s):

91-1661 (DIL), 1662 (DIL), 1664 (DIL), 1665 (DIL), 1666 (DIL),
1667 (DIL), 1668 (DIL), 1669 (DIL), 1671 (DIL), 1672 (DIL),
1673 (DIL), 1674 (DIL), 1682 (DIL), 1683 (DIL), 1685 (DIL),
1686 (DIL), 1687 (DIL), 1688 (DIL), 1689 (DIL), 1690 (DIL),
1692 (DIL), 1693 (DIL), 1694 (DIL), 1695 (DIL), 1703 (DIL),
1704 (DIL), 1706 (DIL), 1707 (DIL), 1708 (DIL), 1709 (DIL),
3474 (DIL), 3475 (DIL), 3476 (DIL), 3477 (DIL), 3478 (DIL),
3479 (DIL), 3480 (DIL), 3481 (DIL), 3482 (DIL), 3483 (DIL),
3484 (DIL), 3485 (DIL), 3486 (DIL), 3487 (DIL), 3488 (DIL),
3489 (DIL), 3490 (DIL), 3491 (DIL), 3492 (DIL), 3493 (DIL),
3494 (DIL), 3495 (DIL), 3496 (DIL), 3497 (DIL), 3498 (DIL)

STOCKWATER: Sole Supply: UNEVALUATED ELUS Group Total: 1000.0000 Div Limit: 15.0 acft. PERIOD OF USE: 01/01 TO 12/31

PLACE OF USE for STOCKWATERING*****

	NORTH-WEST ⁴				NORTH-EAST ⁴				SOUTH-WEST ⁴				SOUTH-EAST ⁴			
	NW	NE	SW	SE	NW	NE	SW	SE	NW	NE	SW	SE	NW	NE	SW	SE
Sec 34 T 13S R 13E SLBM	*	:	:	*	*	:	:	*	*	:	:	*	*	:	:	*

OTHER COMMENTS*****

1/16 Interest.

*****END OF DATA*****

Utah Division of Water Rights | 1594 West North Temple Suite 220, P.O. Box 146300, Salt Lake City, Utah 84114-6300 | 801-538-7240
[Natural Resources](#) | [Contact](#) | [Disclaimer](#) | [Privacy Policy](#) | [Accessibility Policy](#) | [Emergency Evacuation Plan](#)



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Utah Division of Water Rights

Select Related Information

(WARNING: Water Rights makes NO claims as to the accuracy of this data.) RUN DATE: 01/26/2011

WATER RIGHT: 91-3480

APPLICATION/CLAIM NO.:

CERT. NO.:

OWNERSHIP*****

NAME: W. Lavon & Marianne W. Day

ADDR: Castle Dale UT

REMARKS: joint tenants

DATES, ETC.*****

LAND OWNED BY APPLICANT? Yes

COUNTY TAX ID#:

FILED:

PRIORITY: 00/00/1869

PUB BEGAN:

PUB ENDED:

NEWSPAPER:

ProtestEnd:

PROTESTED: [No]

HEARNG HLD:

SE ACTION: [

ActionDate:

PROOF DUE:

EXTENSION:

ELEC/PROOF: [

ELEC/PROOF:

CERT/WUC: 05/28/1968

LAP, ETC:

LAPS LETTER:

RUSH LETTR:

RENOVATE:

RECON REQ:

TYPE: [

]

PD BOOK: [91-5

MAP: [57

PUB DATE:

*TYPE -- DOCUMENT -- STATUS

Type of Right: Diligence Claim

Source of Info: Proposed Determination

Status:

LOCATION OF WATER RIGHT***(Points of Diversion: Click on Location to access PLAT Program.)*****MAP VIEWER*****

FLOW: 0.011 cfs

SOURCE: Unnamed Spring

COUNTY: Carbon

COMMON DESCRIPTION:

POINT OF DIVERSION:

(1) Stockwatering directly on spring located at S 660 ft. W 660 ft. from E4 corner, Sec 34, T13S, R13E, SLBM.

COMMENT: Administratively updated by State Engineer.

USES OF WATER RIGHT***** ELU -- Equivalent Livestock Unit (cow, horse, etc.) ***** EDU -- Equivalent Domestic Unit or 1 Family

SUPPLEMENTAL GROUP NO.: 614121. Water Rights Appurtenant to the following use(s):

91-1661(DIL), 1662(DIL), 1664(DIL), 1665(DIL), 1666(DIL)

1667(DIL), 1668(DIL), 1669(DIL), 1671(DIL), 1672(DIL)

1673(DIL), 1674(DIL), 1682(DIL), 1683(DIL), 1685(DIL)

1686(DIL), 1687(DIL), 1688(DIL), 1689(DIL), 1690(DIL)

1692(DIL), 1693(DIL), 1694(DIL), 1695(DIL), 1703(DIL)

1704(DIL), 1706(DIL), 1707(DIL), 1708(DIL), 1709(DIL)

3474(DIL), 3475(DIL), 3476(DIL), 3477(DIL), 3478(DIL)

3479(DIL), 3480(DIL), 3481(DIL), 3482(DIL), 3483(DIL)

3484(DIL), 3485(DIL), 3486(DIL), 3487(DIL), 3488(DIL)

3489(DIL), 3490(DIL), 3491(DIL), 3492(DIL), 3493(DIL)

3494(DIL), 3495(DIL), 3496(DIL), 3497(DIL), 3498(DIL)

STOCKWATER: Sole Supply: UNEVALUATED ELUs Group Total: 1000.0000 Div Limit: 15.0 acft. PERIOD OF USE: 01/01 TO 12/31

PLACE OF USE for STOCKWATERING*****

NORTH-WEST¼

NORTH-EAST¼

SOUTH-WEST¼

SOUTH-EAST¼

NW NE SW SE

NW NE SW SE

NW NE SW SE

NW NE SW SE

Sec 34 T 13S R 13E SLBM

* : : *

* : : *

* : : *

* : X : *

OTHER COMMENTS*****

1/24 Interest.

*****END OF DATA*****

utah Online Services Agency List Business

Utah Division of Water Rights

Search

Select Related Information

(WARNING: Water Rights makes NO claims as to the accuracy of this data.) RUN DATE: 01/26/2011

WATER RIGHT: 91-3481

APPLICATION/CLAIM NO.:

CERT. NO.:

OWNERSHIP*****

NAME: W. Lavon & Marianne W. Day

ADDR: Castle Dale UT

REMARKS: joint tenants

DATES, ETC.*****

LAND OWNED BY APPLICANT? Yes COUNTY TAX ID#:
FILED: PRIORITY: 00/00/1869 | PUB BEGAN: | PUB ENDED: | NEWSPAPER:
ProtestEnd: | PROTESTED: [No] | HEARNG HLD: | SE ACTION: [] | ActionDate: | PROOF DUE:
EXTENSION: | ELEC/PROOF: [] | ELEC/PROOF: | CERT/WUC: | LAP, ETC: | LAPS LETTER:
RUSH LETTR: | RENOVATE: | RECON REQ: | TYPE: []
PD BOOK: [91-5] | MAP: [57] | PUB DATE:

*TYPE -- DOCUMENT -- STATUS--

Type of Right: Diligence Claim

Source of Info: Proposed Determination

Status:

LOCATION OF WATER RIGHT*** (Points of Diversion: Click on Location to access PLAT Program.) *****MAP VIEWER*****

FLOW: 0.011 cfs

SOURCE: Unnamed Spring

COUNTY: Carbon

COMMON DESCRIPTION:

POINT OF DIVERSION:

(1) Stockwatering directly on spring located at S 660 ft. W 660 ft. from E4 corner, Sec 34, T13S, R13E, SLBM.
COMMENT: Administratively updated by State Engineer.

USES OF WATER RIGHT***** ELU -- Equivalent Livestock Unit (cow, horse, etc.) ***** EDU -- Equivalent Domestic Unit or 1 Family

SUPPLEMENTAL GROUP NO.: 614121. Water Rights Appurtenant to the following use(s):

91-1661(DIL), 1662(DIL), 1664(DIL), 1665(DIL), 1666(DIL),
1667(DIL), 1668(DIL), 1669(DIL), 1671(DIL), 1672(DIL),
1673(DIL), 1674(DIL), 1682(DIL), 1683(DIL), 1685(DIL),
1686(DIL), 1687(DIL), 1688(DIL), 1689(DIL), 1690(DIL),
1692(DIL), 1693(DIL), 1694(DIL), 1695(DIL), 1703(DIL),
1704(DIL), 1706(DIL), 1707(DIL), 1708(DIL), 1709(DIL),
3474(DIL), 3475(DIL), 3476(DIL), 3477(DIL), 3478(DIL),
3479(DIL), 3480(DIL), 3481(DIL), 3482(DIL), 3483(DIL),
3484(DIL), 3485(DIL), 3486(DIL), 3487(DIL), 3488(DIL),
3489(DIL), 3490(DIL), 3491(DIL), 3492(DIL), 3493(DIL),
3494(DIL), 3495(DIL), 3496(DIL), 3497(DIL), 3498(DIL)

STOCKWATER: Sole Supply: UNEVALUATED ELUs Group Total: 1000.0000 Div Limit: 15.0 acft. PERIOD OF USE: 01/01 TO 12/31

PLACE OF USE for STOCKWATERING*****

	NORTH-WEST¼	NORTH-EAST¼	SOUTH-WEST¼	SOUTH-EAST¼
	NW NE SW SE	NW NE SW SE	NW NE SW SE	NW NE SW SE
Sec 34 T 13S R 13E SLBM	* : : *	* : : *	* : : *	* : X: : *

OTHER COMMENTS*****



Online Services Agency List Business

Utah Division of Water Rights

Search

Select Related Information

(WARNING: Water Rights makes NO claims as to the accuracy of this data.) RUN DATE: 01/26/2011

WATER RIGHT: 91-3482

APPLICATION/CLAIM NO.:

CERT. NO.:

OWNERSHIP*****

NAME: W. Lavon & Marianne W. Day

ADDR: Castle Dale UT

REMARKS: joint tenants

DATES, ETC.*****

LAND OWNED BY APPLICANT? Yes

COUNTY TAX ID#:

FILED:

PRIORITY: 00/00/1869

PUB BEGAN:

PUB ENDED:

NEWSPAPER:

ProtestEnd:

PROTESTED: [No]

HEARING HLD:

ISE ACTION: [

ActionDate:

PROOF DUE:

EXTENSION:

ELEC/PROOF: [

ELEC/PROOF:

CERT/WUC: 01/02/1968

LAP, ETC:

LAPS LETTER:

RUSH LETTR:

RENOVATE:

RECON REQ:

I TYPE: [

]

PD BOOK: [91-5

MAP: [57

PUB DATE:

*TYPE -- DOCUMENT -- STATUS--

Type of Right: Diligence Claim

Source of Info: Proposed Determination

Status:

LOCATION OF WATER RIGHT*** (Points of Diversion: Click on Location to access PLAT Program.)*****MAP VIEWER*****

FLOW: 0.011 cfs

SOURCE: Unnamed Spring

COUNTY: Carbon

COMMON DESCRIPTION:

POINT OF DIVERSION:

(1) Stockwatering directly on spring located at S 660 ft. W 660 ft. from E4 corner, Sec 34, T13S, R13E, SLBM.

COMMENT: Administratively updated by State Engineer.

USES OF WATER RIGHT***** ELU -- Equivalent Livestock Unit (cow, horse, etc.) ***** EDU -- Equivalent Domestic Unit or 1 Family

SUPPLEMENTAL GROUP NO.: 614121. Water Rights Appurtenant to the following use(s):

91-1661 (DIL), 1662 (DIL), 1664 (DIL), 1665 (DIL), 1666 (DIL),

1667 (DIL), 1668 (DIL), 1669 (DIL), 1671 (DIL), 1672 (DIL),

1673 (DIL), 1674 (DIL), 1682 (DIL), 1683 (DIL), 1685 (DIL),

1686 (DIL), 1687 (DIL), 1688 (DIL), 1689 (DIL), 1690 (DIL),

1692 (DIL), 1693 (DIL), 1694 (DIL), 1695 (DIL), 1703 (DIL),

1704 (DIL), 1706 (DIL), 1707 (DIL), 1708 (DIL), 1709 (DIL),

3474 (DIL), 3475 (DIL), 3476 (DIL), 3477 (DIL), 3478 (DIL),

3479 (DIL), 3480 (DIL), 3481 (DIL), 3482 (DIL), 3483 (DIL),

3484 (DIL), 3485 (DIL), 3486 (DIL), 3487 (DIL), 3488 (DIL),

3489 (DIL), 3490 (DIL), 3491 (DIL), 3492 (DIL), 3493 (DIL),

3494 (DIL), 3495 (DIL), 3496 (DIL), 3497 (DIL), 3498 (DIL)

STOCKWATER: Sole Supply: UNEVALUATED ELUs Group Total: 1000.0000 Div Limit: 15.0 acft. PERIOD OF USE: 01/01 To 12/31

PLACE OF USE for STOCKWATERING*****

NORTH-WEST¼

NORTH-EAST¼

SOUTH-WEST¼

SOUTH-EAST¼

NW NE SW SE

NW NE SW SE

NW NE SW SE

NW NE SW SE

Sec 34 T 13S R 13E SLBM

* : : : *

* : : : *

* : : : *

* : X: : *

OTHER COMMENTS*****

11/48 Interest.

*****E N D O F D A T A*****

Utah
800 Online Services Agency List Business

Utah Division of Water Rights

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Select Related Information

(WARNING: Water Rights makes NO claims as to the accuracy of this data.) RUN DATE: 01/26/2011

WATER RIGHT: 91-3483 APPLICATION/CLAIM NO.: CERT. NO.:

OWNERSHIP*****

NAME: W. Lavon & Marianne W. Day

ADDR: Castle Dale UT

REMARKS: joint tenants

DATES, ETC.*****

LAND OWNED BY APPLICANT? Yes COUNTY TAX ID#:

FILED:	PRIORITY: 00/00/1869	PUB BEGAN:	PUB ENDED:	NEWSPAPER:
ProtestEnd:	PROTESTED: [No]	HEARNG HLD:	SE ACTION: [	ActionDate:
EXTENSION:	ELEC/PROOF: [	ELEC/PROOF:	CERT/WUC: 03/08/1972	LAP, ETC:
RUSH LETTR:	RENOVATE:	RECON REQ:	TYPE: [	LAPS LETTER:
PD BOOK: [91-5	MAP: [57]	PUB DATE:		

*TYPE -- DOCUMENT -- STATUS

Type of Right: Diligence Claim Source of Info: Proposed Determination Status:

LOCATION OF WATER RIGHT** (Points of Diversion: Click on Location to access PLAT Program.) *****MAP VIEWER*****

FLOW: 0.011 cfs SOURCE: Unnamed Spring
COUNTY: Carbon COMMON DESCRIPTION:

POINT OF DIVERSION:

(1) Stockwatering directly on spring located at S 660 ft. W 660 ft. from E4 corner, Sec 34, T13S, R13E, SLBM.
COMMENT: Administratively updated by State Engineer.

USES OF WATER RIGHT***** ELU -- Equivalent Livestock Unit (cow, horse, etc.) ***** EDU -- Equivalent Domestic Unit or 1 Family

SUPPLEMENTAL GROUP NO.: 614121. Water Rights Appurtenant to the following use(s):

91-1661(DIL), 1662(DIL), 1664(DIL), 1665(DIL), 1666(DIL),
1667(DIL), 1668(DIL), 1669(DIL), 1671(DIL), 1672(DIL),
1673(DIL), 1674(DIL), 1682(DIL), 1683(DIL), 1685(DIL),
1686(DIL), 1687(DIL), 1688(DIL), 1689(DIL), 1690(DIL),
1692(DIL), 1693(DIL), 1694(DIL), 1695(DIL), 1703(DIL),
1704(DIL), 1706(DIL), 1707(DIL), 1708(DIL), 1709(DIL),
3474(DIL), 3475(DIL), 3476(DIL), 3477(DIL), 3478(DIL),
3479(DIL), 3480(DIL), 3481(DIL), 3482(DIL), 3483(DIL),
3484(DIL), 3485(DIL), 3486(DIL), 3487(DIL), 3488(DIL),
3489(DIL), 3490(DIL), 3491(DIL), 3492(DIL), 3493(DIL),
3494(DIL), 3495(DIL), 3496(DIL), 3497(DIL), 3498(DIL)

STOCKWATER: Sole Supply: UNEVALUATED ELUs Group Total: 1000.0000 Div Limit: 15.0 acft. PERIOD OF USE: 01/01 TO 12/31

PLACE OF USE for STOCKWATERING*****

	NORTH-WEST¼ NW NE SW SE	NORTH-EAST¼ NW NE SW SE	SOUTH-WEST¼ NW NE SW SE	SOUTH-EAST¼ NW NE SW SE
Sec 34 T 13S R 13E SLBM	* : : *	* : : *	* : : *	* : X : *

OTHER COMMENTS*****

7/24 Interest.

*****END OF DATA*****

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Select Related Information

THIS RIGHT IS BEING PROTESTED IN A PROPOSED DETERMINATION BOOK!!!

(WARNING: Water Rights makes NO claims as to the accuracy of this data.) RUN DATE: 01/26/2011

WATER RIGHT: 91-3519

APPLICATION/CLAIM NO.:

CERT. NO.:

OWNERSHIP*****

NAME: Magnificent Seven L.L.C.

ADDR: c/o GREG JENSEN

111 E CLARK ST

ALBERTA LEA, MN 56007

INTEREST: 34.5% REMARKS: a Utah Limited Liability Company

NAME: Penta Creek L.L.C.

ADDR: c/o GREG JENSEN

111 E CLARK ST

ALBERTA LEA, MN 56007

INTEREST: 65.5% REMARKS: a Utah Limited Liability Company

DATES, ETC.*****

LAND OWNED BY APPLICANT? Yes

COUNTY TAX ID#:

FILED:

|PRIORITY:

/

/1869|PUB BEGAN:

|PUB ENDED:

|NEWSPAPER:

ProtestEnd:

|PROTESTED: {No

}|HEARNG HLD:

|SE ACTION: [

}|ActionDate:

|PROOF DUE:

EXTENSION:

|ELEC/PROOF: {

}|ELEC/PROOF:

|CERT/WUC: 10/28/1970|LAP, ETC:

|LAPS LETTER:

RUSH LETTR:

|RENOVATE:

|RECON REQ:

|TYPE: [

]

PD BOOK: [91-5

}|MAP: [58

}|PUB DATE:

*TYPE -- DOCUMENT -- STATUS--

Type of Right: Diligence Claim

Source of Info: Proposed Determination

Status: Water User's Claim

LOCATION OF WATER RIGHT*** (Points of Diversion: Click on Location to access PLAT Program.)*****[MAP VIEWER](#)*****

FLOW:

COUNTY: Carbon

COMMON DESCRIPTION:

SOURCE: Right Fork Grassy Trail Creek

POINT OF DIVERSION.-- POINT TO POINT:

(1) Stockwatering directly on stream from a point at S 660 ft. W 1980 ft. from E4 corner, Sec 06, T14S, R14E, SLBM, to a point at N 660 ft. W 660 ft. from S4 corner, Sec 06, T14S, R14E, SLBM.

COMMENT: Administratively updated by State Engineer.

USES OF WATER RIGHT***** ELU -- Equivalent Livestock Unit (cow, horse, etc.) ***** EDU -- Equivalent Domestic Unit or 1 Family

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 Select Related Information

THIS RIGHT IS BEING PROTESTED IN A PROPOSED DETERMINATION BOOK!!!

(WARNING: Water Rights makes NO claims as to the accuracy of this data.) RUN DATE: 01/26/2011

WATER RIGHT: **91-3520** APPLICATION/CLAIM NO.: CERT. NO.:

OWNERSHIP*****

NAME: Magnificent Seven L.L.C.
 ADDR: c/o Greg Jensen
 111 East Clark Street
 Alberta Lea, MN 56007
 INTEREST: 34.5% REMARKS: a Utah Limited Liability Company

NAME: Penta Creek L.L.C.
 ADDR: c/o Greg Jensen
 111 East Clark Street
 Alberta Lea, MN 56007
 INTEREST: 65.5% REMARKS: a Utah Limited Liability Company

DATES, ETC.*****

LAND OWNED BY APPLICANT? Yes COUNTY TAX ID#:
 FILED: PRIORITY: / /1869|PUB BEGAN: |PUB ENDED: |NEWSPAPER:
 ProtestEnd: |PROTESTED: [No] |HEARNG HLD: |SE ACTION: [|ActionDate: |PROOF DUE:
 EXTENSION: |ELEC/PROOF:[|ELEC/PROOF: |CERT/WUC: 10/28/1970|LAP, ETC: |LAPS LETTER:
 RUSH LETTR: |RENOVATE: |RECON REQ: |TYPE: [|
 PD BOOK: [91-5] |MAP: [58c] |PUB DATE:
 *TYPE -- DOCUMENT -- STATUS

Type of Right: Diligence Claim Source of Info: Proposed Determination Status: Water User's Claim

LOCATION OF WATER RIGHT*** (Points of Diversion: Click on Location to access PLAT Program.)*******MAP VIEWER*******

FLOW: SOURCE: Right Fork Grassy Trail Creek
 COUNTY: Carbon COMMON DESCRIPTION:

POINT OF DIVERSION -- POINT TO POINT:
 (1) Stockwatering directly on stream from a point at S 660 ft. W 660 ft. from N4 corner, Sec 07, T14S, R14E, SLBM,
 to a point at N 660 ft. E 1980 ft. from W4 corner, Sec 07, T14S, R14E, SLBM.
 COMMENT: Administratively updated by State Engineer.

USES OF WATER RIGHT***** ELU -- Equivalent Livestock Unit (cow, horse, etc.) ***** EDU -- Equivalent Domestic Unit or 1 Family

SUPPLEMENTAL GROUP NO.: **615821**. Water Rights Appurtenant to the following use(s):
91-98(CERT), 298(DIL), 1635(DIL), 1640(DIL), 2655(DIL)
3006(WUC), 3169(DIL), 3458(DIL), 3459(DIL), 3464(DIL)
3465(DIL), 3519(WUC), 3520(WUC), 3521(DIL), 3523(DIL)
3526(DIL), 3530(DIL), 3532(DIL), 3533(DIL), 3579(DIL)
4947(PAC), 4948(PAC)

STOCKWATER: Sole Supply: UNEVALUATED ELUs Group Total: 900.0000 Div Limit: PERIOD OF USE: 01/01 TO 12/31

PLACE OF USE for STOCKWATERING*****

	NORTH-WEST¼ NW NE SW SE	NORTH-EAST¼ NW NE SW SE	SOUTH-WEST¼ NW NE SW SE	SOUTH-EAST¼ NW NE SW SE
Sec 07 T 14S R 14E SLBM	* : X: : X*	* : : : *	* : : : *	* : : : *

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Select Related Information

(WARNING: Water Rights makes NO claims as to the accuracy of this data.) RUN DATE: 01/26/2011

WATER RIGHT: 91-3521

APPLICATION/CLAIM NO.:

CERT. NO.:

OWNERSHIP*****

NAME: Magnificent Seven L.L.C.

ADDR: c/o GREG JENSEN

111 E CLARK ST

ALBERTA LEA, MN 56007

INTEREST: 34.5% REMARKS: a Utah Limited Liability Company

NAME: Penta Creek L.L.C.

ADDR: c/o GREG JENSEN

111 E CLARK ST

ALBERTA LEA, MN 56007

INTEREST: 65.5% REMARKS: a Utah Limited Liability Company

DATES, ETC.*****

LAND OWNED BY APPLICANT? Yes

COUNTY TAX ID#:

FILED:

PRIORITY: 00/00/1869

PUB BEGAN:

[PUB ENDED:

[NEWSPAPER:

ProtestEnd:

[PROTESTED: [No

]HEARING HLD:

[SE ACTION: [

]ActionDate:

[PROOF DUE:

EXTENSION:

[ELEC/PROOF: [

]ELEC/PROOF:

[CERT/WUC: 10/28/1970

]LAP, ETC:

[LAPS LETTER:

RUSH LETTER:

[RENOVATE:

]RECON REQ:

[TYPE: [

]PUB DATE:

PD BOOK: [91-5

]MAP: [58c

]PUB DATE:

*TYPE -- DOCUMENT --

STATUS

Type of Right: Diligence Claim

Source of Info: Proposed Determination

Status:

LOCATION OF WATER RIGHT***(Points of Diversion: Click on Location to access PLAT Program.)*****[MAP VIEWER](#)*****

FLOW:

SOURCE: Grassy Trail Creek

COUNTY: Carbon

COMMON DESCRIPTION:

POINT OF DIVERSION -- POINT TO POINT:

(1) Stockwatering directly on stream from a point at N 660 ft. E 1980 ft. from W4 corner, Sec 07, T14S, R14E, SLBM, to a point at S 70 ft. W 2270 ft. from E4 corner, Sec 06, T15S, R14E, SLBM.
COMMENT: Administratively updated by State Engineer.

USES OF WATER RIGHT***** ELU -- Equivalent Livestock Unit (cow, horse, etc.) ***** EDU -- Equivalent Domestic Unit or 1 Family

SUPPLEMENTAL GROUP NO.: 614126. Water Rights Appurtenant to the following use(s):

91-408(DIL), 660(DIL), 665(DIL), 667(DIL), 1678(DIL)
1679(DIL), 1680(DIL), 1681(DIL), 2233(DIL), 2341(DIL)
2647(DIL), 3041(DIL), 3131(DIL), 3419(DIL), 3423(DIL)
3425(DIL), 3440(DIL), 3504(DIL), 3505(DIL), 3506(DIL)
3507(DIL), 3508(DIL), 3509(DIL), 3510(DIL), 3511(DIL)
3512(DIL), 3513(DIL), 3514(DIL), 3515(DIL), 3516(DIL)
3517(DIL), 3518(DIL), 3521(DIL), 3525(DIL), 3591(DIL)
3681(DIL), 3687(DIL), 3908(DIL)

STOCKWATER: Sole Supply: UNEVALUATED ELUs Group Total: 810.0000 Div Limit: 12.16 acft. PERIOD OF USE: 05/01 TO 11/30

SUPPLEMENTAL GROUP NO.: 614804. Water Rights Appurtenant to the following use(s):

91-408(DIL), 660(DIL), 665(DIL), 667(DIL), 1678(DIL)
1679(DIL), 1680(DIL), 1681(DIL), 2233(DIL), 2341(DIL)
2647(DIL), 3041(DIL), 3131(DIL), 3419(DIL), 3421(DIL)
3423(DIL), 3425(DIL), 3440(DIL), 3504(DIL), 3505(DIL)
3506(DIL), 3507(DIL), 3508(DIL), 3509(DIL), 3510(DIL)
3511(DIL), 3512(DIL), 3513(DIL), 3514(DIL), 3515(DIL)
3516(DIL), 3517(DIL), 3518(DIL), 3521(DIL), 3525(DIL)
3591(DIL), 3681(DIL), 3687(DIL), 3908(DIL)

STOCKWATER: Sole Supply: UNEVALUATED ELUs Group Total: 810.0000 Div Limit: 12.16 acft. PERIOD OF USE: 05/01 TO 11/30

SUPPLEMENTAL GROUP NO.: 615821. Water Rights Appurtenant to the following use(s):

91-98(CERT), 298(DIL), 1635(DIL), 1640(DIL), 2655(DIL)
3006(WUC), 3169(DIL), 3458(DIL), 3459(DIL), 3464(DIL)
3465(DIL), 3519(WUC), 3520(WUC), 3521(DIL), 3523(DIL)
3526(DIL), 3530(DIL), 3532(DIL), 3533(DIL), 3579(DIL)
4947(PAC), 4948(PAC)

STOCKWATER: Sole Supply: UNEVALUATED ELUs Group Total: 900.0000 Div Limit: PERIOD OF USE: 01/01 TO 12/31

PLACE OF USE for STOCKWATERING*****

	NORTH-WEST¼	NORTH-EAST¼	SOUTH-WEST¼	SOUTH-EAST¼
	NW NE SW SE	NW NE SW SE	NW NE SW SE	NW NE SW SE
Sec 07 T 14S R 14E SLBM	* : : : X*	* : : : *	* : : : *	* : : : *
Sec 06 T 15S R 14E SLBM	* : : : *	* : : : *	* : : : *	* X : : : *

*****END OF DATA*****

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Select Related Information

(WARNING: Water Rights makes NO claims as to the accuracy of this data.) RUN DATE: 01/26/2011

WATER RIGHT: **91-3522**

APPLICATION/CLAIM NO.:

CERT. NO.:

OWNERSHIP*****

NAME: Sunnyside Cogeneration Associates

ADDR: Attn: Plant Manager

P.O. Box 159

Sunnyside UT 84539

INTEREST: 100%

REMARKS:

DATES, ETC.*****

LAND OWNED BY APPLICANT? Yes

COUNTY TAX ID#:

FILED:

PRIORITY: 00/00/1869

PUB BEGAN:

PUB ENDED:

NEWSPAPER:

ProtestEnd:

PROTESTED: [No]

HEARING HLD:

SE ACTION: [

ActionDate:

PROOF DUE:

EXTENSION:

ELEC/PROOF: [

ELEC/PROOF:

CERT/WUC: 07/30/1970

LAP, ETC:

LAPS LETTER:

RUSH LETTR:

RENOVATE:

RECON REQ:

TYPE: [

]

PD BOOK: [91-5

MAP: [69cc

PUB DATE:

*TYPE -- DOCUMENT -- STATUS--

Type of Right: Diligence Claim

Source of Info: Proposed Determination

Status:

LOCATION OF WATER RIGHT** (Points of Diversion: Click on Location to access PLAT Program.)*****[MAP VIEWER](#)*****

FLOW:

SOURCE: Grassy Trail Creek

COUNTY: Carbon

COMMON DESCRIPTION:

POINT OF DIVERSION -- POINT TO POINT:

(1) Stockwatering directly on stream from a point at S 70 ft. W 2270 ft. from E4 corner, Sec 06, T15S, R14E, SLBM,
to a point at S 660 ft. W 1980 ft. from E4 corner, Sec 06, T14S, R14E, SLBM.

COMMENT: Administratively updated by State Engineer.

USES OF WATER RIGHT***** ELU -- Equivalent Livestock Unit (cow, horse, etc.) ***** EDU -- Equivalent Domestic Unit or 1 Family

SUPPLEMENTAL GROUP No.: **614821**. Water Rights Appurtenant to the following use(s):91-3522 (DIL), 3524 (DIL), 3527 (DIL), 3759 (DIL), 3882 (DIL)3883 (DIL)

STOCKWATER: Sole Supply: UNEVALUATED ELUS Group Total: 150.0000 Div Limit: 4.2 acft. PERIOD OF USE: 01/01 TO 12/31

SUPPLEMENTAL GROUP No.: **615817**. Water Rights Appurtenant to the following use(s):91-37 (CERT), 99 (CERT), 118 (CERT), 139 (CERT), 143 (CERT)145 (CERT), 158 (CERT), 159 (CERT), 361 (DEC), 364 (DEC)372 (DEC), 3522 (DIL), 3524 (DIL), 3761 (DIL), 4941 (UNAP)4942 (WD)

POWER: SCA Steam Generation Power Plant, rated at 58 MW.

CFS Contributed by this Right for this Use: Unevaluated

PERIOD OF USE: 01/01 TO 12/31

###PLACE OF USE:

-----NORTH WEST QUARTER-----

-----NORTH EAST QUARTER-----

-----SOUTH WEST QUARTER-----

*-----SOUTH EAST

	NW	NE	SW	SE	NW	NE	SW	SE	NW	NE	SW	SE	NW	NE	SW	SE	GROUP
Sec 06 T 15S R 14E SLBM *													X			X	X

PLACE OF USE for STOCKWATERING*****

	NORTH-WEST¼				NORTH-EAST¼				SOUTH-WEST¼				SOUTH-EAST¼			
	NW	NE	SW	SE	NW	NE	SW	SE	NW	NE	SW	SE	NW	NE	SW	SE
Sec 06 T 14S R 14E SLBM	*	:	:	:	*	:	:	:	*	:	:	:	*	:	:	:
Sec 06 T 15S R 14E SLBM	*	:	:	:	*	:	:	:	*	:	:	:	X	:	:	:

*****E N D O F D A T A*****

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Select Related Information

Please be aware that the claim under this Water Right Number has NOT been established in accordance with statute and its validity is in question. Therefore, CAUTION is advised when relying upon this record!!!

(WARNING: Water Rights makes NO claims as to the accuracy of this data.) RUN DATE: 01/26/2011

WATER RIGHT: 91-4398

APPLICATION/CLAIM NO.:

CERT. NO.:

OWNERSHIP*****

NAME: Utah School and Institutional Trust Lands Admin.

ADDR: 675 East 500 South, 5th Floor

Salt Lake City UT 84102

INTEREST: 100%

REMARKS:

DATES, ETC.*****

LAND OWNED BY APPLICANT? Yes

COUNTY TAX ID#:

FILED:

PRIORITY: / /1869

PUB BEGAN:

PUB ENDED:

NEWSPAPER:

ProtestEnd:

PROTESTED: [No]

HEARING HLD:

SE ACTION: [

ActionDate:

PROOF DUE:

EXTENSION:

ELEC/PROOF: [

ELEC/PROOF:

CERT/WUC: 10/24/1986

LAP, ETC:

LAPS LETTER:

RUSH LETTR:

RENOVATE:

RECON REQ:

TYPE: [

PD BOOK: [91-

MAP: [57

PUB DATE:

*TYPE -- DOCUMENT -- STATUS--

Type of Right: Pending Adjudication Claim

Source of Info: Water User's Claim

Status:

LOCATION OF WATER RIGHT*** (Points of Diversion: Click on Location to access PLAT Program.)*****MAP VIEWER*****

FLOW:

COUNTY: Carbon

COMMON DESCRIPTION:

SOURCE: Left Fork Grassy Trail Creek

POINT OF DIVERSION -- POINT TO POINT:

(1) Stockwatering directly on stream from a point at S 660 ft. E 660 ft. from N4 corner, Sec 02, T14S, R13E, SLBM,
to a point at S 660 ft. W 660 ft. from NE corner, Sec 02, T14S, R13E, SLBM.

COMMENT: Administratively updated by State Engineer.

USES OF WATER RIGHT***** ELU -- Equivalent Livestock Unit (cow, horse, etc.) ***** EDU -- Equivalent Domestic Unit or 1 Family

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Select Related Information

Please be aware that the claim under this Water Right Number has NOT been established in accordance with statute and its validity is in question. Therefore, CAUTION is advised when relying upon this record!!!

(WARNING: Water Rights makes NO claims as to the accuracy of this data.) RUN DATE: 01/26/2011

WATER RIGHT: 91-4513

APPLICATION/CLAIM NO.:

CERT. NO.:

OWNERSHIP*****

NAME: Utah School and Institutional Trust Lands Admin.

ADDR: 675 East 500 South, Suite 500

Salt Lake City UT 84102

INTEREST: 100%

REMARKS:

DATES, ETC.*****

LAND OWNED BY APPLICANT?

COUNTY TAX ID#:

FILED:

PRIORITY: / /1869|PUB BEGAN:

|PUB ENDED:

|NEWSPAPER:

ProtestEnd:

|PROTESTED: [No]

|HEARNG HLD:

|SE ACTION: []

|ActionDate:

|PROOF DUE:

EXTENSION:

|ELEC/PROOF: []

|ELEC/PROOF:

|CERT/WUC:

|LAP, ETC:

|LAPS LETTER:

RUSH LETTR:

|RENOVATE:

|RECON REQ:

|TYPE: []

PD BOOK: [91-

|MAP: [57]

|PUB DATE:

*TYPE -- DOCUMENT -- STATUS--

Type of Right: Pending Adjudication Claim

Source of Info: Water User's Claim

Status:

LOCATION OF WATER RIGHT*** (Points of Diversion: Click on Location to access PLAT Program.)*****MAP VIEWER*****

FLOW: 0.015 cfs

COUNTY: Carbon

COMMON DESCRIPTION:

SOURCE: Mels Spring

POINT OF DIVERSION:

(1) Stockwatering directly on spring located at S 660 ft. W 660 ft. from E4 corner, Sec 03, T14S, R13E, SLBM.

COMMENT: Administratively updated by State Engineer.

SOURCE: Mels Spring

USES OF WATER RIGHT***** ELU -- Equivalent Livestock Unit (cow, horse, etc.) ***** EDU -- Equivalent Domestic Unit or 1 Family

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Select Related Information

Please be aware that the claim under this Water Right Number has NOT been established in accordance with statute and its validity is in question. Therefore, CAUTION is advised when relying upon this record!!!

(WARNING: Water Rights makes NO claims as to the accuracy of this data.) RUN DATE: 01/26/2011

WATER RIGHT: 91-4660

APPLICATION/CLAIM NO.:

CERT. NO.:

OWNERSHIP*****

NAME: Price Field Office USA Bureau of Land Management
ADDR: Moab District
125 South 600 West
Price UT 84501

INTEREST: 100% REMARKS:

DATES, ETC.*****

LAND OWNED BY APPLICANT? COUNTY TAX ID#:
FILED: PRIORITY: / 1869 PUB BEGAN: NEWSPAPER:
ProtestEnd: PROTESTED: [No] HEARING HLD: SE ACTION: [] ActionDate: PROOF DUE:
EXTENSION: ELEC/PROOF: [] ELEC/PROOF: CERT/WUC: LAP, ETC: LAPS LETTER:
RUSH LETTR: RENOVATE: RECON REQ: TYPE: []
PD BOOK: [91-] MAP: [57] PUB DATE:

*TYPE -- DOCUMENT -- STATUS--

Type of Right: Pending Adjudication Claim Source of Info: Water User's Claim Status:

LOCATION OF WATER RIGHT***(Points of Diversion: Click on Location to access PLAT Program.)*****MAP VIEWER*****

FLOW: SOURCE: Bear Creek
COUNTY: Carbon COMMON DESCRIPTION:

POINT OF DIVERSION -- POINT TO POINT:

(1) Stockwatering directly on stream from a point at S 660 ft. W 660 ft. from NE corner, Sec 09, T14S, R13E, SLBM,
to a point at N 660 ft. E 660 ft. from SW corner, Sec 09, T14S, R13E, SLBM.
COMMENT: Administratively updated by State Engineer.
SOURCE: Bear Creek

USES OF WATER RIGHT***** ELU -- Equivalent Livestock Unit (cow, horse, etc.) ***** EDU -- Equivalent Domestic Unit or 1 Family

SUPPLEMENTAL GROUP NO.: 615265. Water Rights Appurtenant to the following use(s):

91-2380(DIL), 2580(DIL), 2591(DIL), 2606(DIL), 2650(DIL),
3158(DIL), 3335(DIL), 3540(DIL), 3755(DIL), 3756(DIL),
4393(PAC), 4405(PAC), 4424(PAC), 4464(PAC), 4465(PAC),
4466(PAC), 4467(PAC), 4572(PAC), 4573(PAC), 4574(PAC),
4575(PAC), 4589(PAC), 4638(PAC), 4639(PAC), 4658(PAC),
4659(PAC), 4660(PAC), 4661(PAC), 4786(PAC), 4828(CERT)

STOCKWATER: Sole Supply: UNEVALUATED ELUS Group Total: 15.0000 Div Limit: PERIOD OF USE: 01/01 TO 12/31
Mud Springs Allotment

SUPPLEMENTAL GROUP NO.: 615666. Water Rights Appurtenant to the following use(s):

91-2380(DIL), 2580(DIL), 2591(DIL), 2606(DIL), 2650(DIL),
3158(DIL), 3335(DIL), 3540(DIL), 3755(DIL), 3756(DIL),
4393(PAC), 4405(PAC), 4424(PAC), 4464(PAC), 4465(PAC),
4466(PAC), 4467(PAC), 4572(PAC), 4573(PAC), 4574(PAC),
4575(PAC), 4589(PAC), 4638(PAC), 4639(PAC), 4658(PAC),
4659(PAC), 4660(PAC), 4661(PAC), 4786(PAC), 4787(PAC),
4827(CERT), 4828(CERT)

STOCKWATER: Sole Supply: UNEVALUATED ELUS Group Total: 15.0000 Div Limit: PERIOD OF USE: 01/01 TO 12/31
Mud Springs Allotment

SUPPLEMENTAL GROUP NO.: 615699. Water Rights Appurtenant to the following use(s):

91-2380(DIL), 2580(DIL), 2591(DIL), 2606(DIL), 2650(DIL),
3158(DIL), 3335(DIL), 3540(DIL), 3755(DIL), 3756(DIL),
4393(PAC), 4405(PAC), 4424(PAC), 4464(PAC), 4465(PAC),
4466(PAC), 4467(PAC), 4572(PAC), 4573(PAC), 4574(PAC),
4575(PAC), 4589(PAC), 4638(PAC), 4639(PAC), 4658(PAC),
4659(PAC), 4660(PAC), 4661(PAC), 4786(PAC), 4827(CERT),
4828(CERT)

STOCKWATER: Sole Supply: UNEVALUATED ELUS Group Total: 315.0000 Div Limit: PERIOD OF USE: 01/01 TO 12/31
Mud Springs Allotment

SUPPLEMENTAL GROUP NO.: 630403. Water Rights Appurtenant to the following use(s):

91-4393(PAC), 4405(PAC), 4424(PAC), 4464(PAC), 4465(PAC),
4466(PAC), 4467(PAC), 4572(PAC), 4573(PAC), 4574(PAC),
4575(PAC), 4589(PAC), 4638(PAC), 4639(PAC), 4658(PAC),
4659(PAC), 4660(PAC), 4661(PAC), 4786(PAC), 4787(PAC),
4827(CERT), 4828(CERT)

WILDLIFE: 1 elk, 117 antelope, 380 deer, small mammals and birds PERIOD OF USE: 01/01 TO 12/31
Acres Feet Contributed by this Right for this Use: Unevaluated
Mud Springs Allotment

PLACE OF USE for STOCKWATERING*****

	NORTH-WEST¼	NORTH-EAST¼	SOUTH-WEST¼	SOUTH-EAST¼
	NW NE SW SE	NW NE SW SE	NW NE SW SE	NW NE SW SE
Sec 09 T 14S R 13E SLEM	* : : : *	* : X: : *	* : : X: *	* : : : *
*****E N D O F D A T A*****				

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Please be aware that the claim under this Water Right Number has NOT been established in accordance with statute and its validity is in question. Therefore, CAUTION is advised when relying upon this record!!!

(WARNING: Water Rights makes NO claims as to the accuracy of this data.) RUN DATE: 01/26/2011

WATER RIGHT: 91-4681 APPLICATION/CLAIM NO.: CERT. NO.:
OWNERSHIP*****

NAME: Utah School and Institutional Trust Lands Admin.
ADDR: 675 East 500 South, Suite 500
Salt Lake City UT 84102
INTEREST: 100% REMARKS:

DATES, ETC.*****

LAND OWNED BY APPLICANT? COUNTY TAX ID#:
FILED: PRIORITY: / 1869/PUB BEGAN: PUB ENDED: NEWSPAPER:
ProtestEnd: PROTESTED: [No] HEARING HLD: SE ACTION: [] ActionDate: PROOF DUE:
EXTENSION: ELEC/PROOF: [] ELEC/PROOF: ICERT/WUC: LAP, ETC: LAPS LETTER:
RUSH LETTR: RENOVATE: RECON REQ: TYPE: []
PD BOOK: [91-] MAP: [57] PUB DATE:

*TYPE -- DOCUMENT -- STATUS
Type of Right: Pending Adjudication Claim Source of Info: Water User's Claim Status:

LOCATION OF WATER RIGHT*** (Points of Diversion: Click on Location to access PLAT Program.)*****MAP VIEWER*****

FLOW: SOURCE: Bear Creek
COUNTY: Carbon COMMON DESCRIPTION:

POINT OF DIVERSION -- POINT TO POINT:
(1) Stockwatering directly on stream from a point at N 660 ft. E 660 ft. from W4 corner, Sec 03, T14S, R13E, SLBM,
to a point at N 660 ft. W 660 ft. from SE corner, Sec 04, T14S, R13E, SLBM.
COMMENT: Administratively updated by State Engineer.
SOURCE: Bear Creek

USES OF WATER RIGHT***** ELU -- Equivalent Livestock Unit (cow, horse, etc.) ***** EDU -- Equivalent Domestic Unit or 1 Family

SUPPLEMENTAL GROUP NO.: 615421. Water Rights Appurtenant to the following use(s):
91-4545(PAC), 4546(PAC), 4606(PAC), 4681(PAC), 4775(PAC),
93-1126(DIL), 1291(DIL), 3126(DIL), 3230(DIL), 3744(LAP)

STOCKWATER: Sole Supply: UNEVALUATED ELUs Group Total: 3.0000 Div Limit: PERIOD OF USE: 01/01 TO 12/31
Rock Canyon Allotment

WILDLIFE: 19 Deer, 5 Elk
Acre Feet Contributed by this Right for this Use: Unevaluated PERIOD OF USE: 01/01 TO 12/31
Rock Canyon Allotment

SUPPLEMENTAL GROUP NO.: 615559. Water Rights Appurtenant to the following use(s):
91-4681(PAC), 93-1126(DIL), 1291(DIL), 3126(DIL), 3230(DIL),
3744(LAP)

STOCKWATER: Sole Supply: UNEVALUATED ELUs Group Total: 13.0000 Div Limit: PERIOD OF USE: 01/01 TO 12/31
Rock Canyon Allotment

PLACE OF USE for STOCKWATERING*****

	NORTH-WEST¼ NW NE SW SE	NORTH-EAST¼ NW NE SW SE	SOUTH-WEST¼ NW NE SW SE	SOUTH-EAST¼ NW NE SW SE
Sec 03 T 14S R 13E SLBM	* : : X: *	* : : : *	* : : : *	* : : : *
Sec 04 T 14S R 13E SLBM	* : : : *	* : : : *	* : : : *	* : : : X*

*****E N D O F D A T A*****

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Please be aware that the claim under this Water Right Number has NOT been established in accordance with statute and its validity is in question. Therefore, CAUTION is advised when relying upon this record!!

(WARNING: Water Rights makes NO claims as to the accuracy of this data.) RUN DATE: 01/26/2011

WATER RIGHT: 91-4682

APPLICATION/CLAIM NO.:

CERT. NO.:

OWNERSHIP*****

NAME: Utah School and Institutional Trust Lands Admin.

ADDR: 675 East 500 South, Suite 500

Salt Lake City UT 84102

INTEREST: 100%

REMARKS:

DATES, ETC.*****

LAND OWNED BY APPLICANT?

COUNTY TAX ID#:

FILED:

PRIORITY:

/

/1869|PUB BEGAN:

|PUB ENDED:

|NEWSPAPER:

ProtestEnd:

|PROTESTED: [No

]|HEARNG HLD:

|SE ACTION: [

]|ActionDate:

|PROOF DUE:

EXTENSION:

|ELEC/PROOF:[

]|ELEC/PROOF:

|CERT/WUC:

|LAP, ETC:

|LAPS LETTER:

RUSH LETTR:

|RENOVATE:

|RECON REQ:

|TYPE: [

]

PD BOOK: [91-

]|MAP: [57

]|PUB DATE:

*TYPE -- DOCUMENT -- STATUS--

Type of Right: Pending Adjudication Claim

Source of Info: Water User's Claim

Status:

LOCATON OF WATER RIGHT*** (Points of Diversion: Click on Location to access PLAT Program.)*****MAP VIEWER*****

FLOW:

SOURCE: Unnamed tributary to Bear Creek

COUNTY: Carbon

COMMON DESCRIPTION:

POINT OF DIVERSION -- POINT TO POINT:

(1) Stockwatering directly on stream from a point at S 660 ft. W 660 ft. from E4 corner, Sec 03, T14S, R13E, SLBM, to a point at S 660 ft. W 660 ft. from NE corner, Sec 09, T14S, R13E, SLBM.

COMMENT: Administratively updated by State Engineer.

SOURCE: Unnamed Tributary to Bear Creek

USES OF WATER RIGHT***** ELU -- Equivalent Livestock Unit (cow, horse, etc.) ***** EDU -- Equivalent Domestic Unit or 1 Family

SUPPLEMENTAL GROUP NO.: 615389. Water Rights Appurtenant to the following use(s):

91-4513(PAC), 4682(PAC), 93-16(DIL), 105(DIL), 168(DIL)

185(DIL), 497(DIL), 501(DIL), 607(DIL), 608(DIL)

1197(DIL), 1298(DIL), 1328(DIL), 1546(DIL), 1553(DIL)

Stockwater period of use for this water right is January 1 through December 31.

STOCKWATER: Sole Supply: UNEVALUATED ELUs

Group Total: 40.0000

Div Limit:

PERIOD OF USE: 07/01 TO 09/30

Bear Canyon Allotment

WILDLIFE: 26 Deer, 9 Elk

PERIOD OF USE: 01/01 TO 12/31

Acre Feet Contributed by this Right for this Use: Unevaluated

Bear Canyon Allotment

SUPPLEMENTAL GROUP NO.: 615560.

91-4682(PAC)

STOCKWATER: 33.0000 Stock Units

Div Limit:

PERIOD OF USE: 01/01 TO 12/31

Bear Canyon Allotment

WILDLIFE: 16 Deer

PERIOD OF USE: 01/01 TO 12/31

Acre Feet Contributed by this Right for this Use: Unevaluated

Bear Canyon Allotment

SUPPLEMENTAL GROUP NO.: 616738. Water Rights Appurtenant to the following use(s):

91-4682(PAC), 93-16(DIL), 105(DIL), 168(DIL), 185(DIL)

497(DIL), 501(DIL), 607(DIL), 608(DIL), 1197(DIL)

1298(DIL), 1328(DIL), 1546(DIL), 1553(DIL)

Stockwater period of use for this water right is January 1 through December 31.

STOCKWATER: Sole Supply: UNEVALUATED ELUs

Group Total: 27.0000

Div Limit:

PERIOD OF USE: 07/01 TO 09/30

Bear Canyon Allotment

PLACE OF USE for STOCKWATERING*****

	NORTH-WEST¼ NW NE SW SE	NORTH-EAST¼ NW NE SW SE	SOUTH-WEST¼ NW NE SW SE	SOUTH-EAST¼ NW NE SW SE
Sec 03 T 14S R 13E SLBM	* : : *	* : : *	* : : *	* : X : *
Sec 09 T 14S R 13E SLBM	* : : *	* : X : *	* : : *	* : : *

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(WARNING: Water Rights makes NO claims as to the accuracy of this data.) RUN DATE: 01/26/2011

WATER RIGHT: 91-4754

APPLICATION/CLAIM NO.:

CERT. NO.:

OWNERSHIP*****

NAME: Price Field Office USA Bureau of Land Management

ADDR: Moab District

125 South 600 West

Price UT 84501

INTEREST: 100%

REMARKS:

DATES, ETC.*****

LAND OWNED BY APPLICANT?

COUNTY TAX ID#:

FILED:

PRIORITY:

/ 1869 PUB BEGAN:

PUB ENDED:

NEWSPAPER:

ProtestEnd:

PROTESTED: [No]

HEARNG HLD:

SE ACTION: [

ActionDate:

PROOF DUE:

EXTENSION:

ELEC/PROOF:[

ELEC/PROOF:

CERT/WUC:

LAP, ETC:

LAPS LETTER:

RUSH LETTR:

RENOVATE:

RECON REQ:

I TYPE: [

]

PD BOOK: [91-

MAP: [57]

PUB DATE:

*TYPE -- DOCUMENT -- STATUS

Type of Right: Diligence Claim

Source of Info: Water User's Claim

Status:

LOCATION OF WATER RIGHT*** (Points of Diversion: Click on Location to access PLAT Program.)*****MAP VIEWER*****

FLOW:

COUNTY: Carbon

COMMON DESCRIPTION:

SOURCE: Unn. Trib. Left Fork Whitmore Canyon

POINT OF DIVERSION -- POINT TO POINT:

(1) Stockwatering directly on stream from a point at N 660 ft. E 660 ft. from S4 corner, Sec 01, T14S, R13E, SLBM,
to a point at S 660 ft. W 660 ft. from E4 corner, Sec 01, T14S, R13E, SLBM.

COMMENT: Administratively updated by State Engineer.

SOURCE: Unn. Trib. Left Fork Whitmore Canyon

USES OF WATER RIGHT***** ELU -- Equivalent Livestock Unit (cow, horse, etc.) ***** EDU -- Equivalent Domestic Unit or 1 Family

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Please be aware that the claim under this Water Right Number has NOT been established in accordance with statute and its validity is in question. Therefore, CAUTION is advised when relying upon this record!!!

(WARNING: Water Rights makes NO claims as to the accuracy of this data.) RUN DATE: 01/26/2011

WATER RIGHT: **91-4755** APPLICATION/CLAIM NO.: CERT. NO.:

OWNERSHIP*****

NAME: Price Field Office USA Bureau of Land Management

ADDR: Moab District
125 South 600 West
Price UT 84501

INTEREST: 100% REMARKS:

DATES, ETC.*****

LAND OWNED BY APPLICANT?

COUNTY TAX ID#:

FILED:	PRIORITY: / /1869	PUB BEGAN:	PUB ENDED:	NEWSPAPER:
ProtestEnd:	PROTESTED: [No]	HEARNG HLD:	SE ACTION: [	ActionDate:
EXTENSION:	ELEC/PROOF: [	ELEC/PROOF:	CERT/WUC:	LAP, ETC:
RUSH LETTR:	RENOVATE:	RECON REQ:	TYPE: [	LAPS LETTER:
PD BOOK: [91-	MAP: [57	PUB DATE:		

*TYPE -- DOCUMENT -- STATUS--

Type of Right: Pending Adjudication Claim Source of Info: Water User's Claim Status:

LOCATION OF WATER RIGHT*** (Points of Diversion: Click on Location to access PLAT Program.)*****[MAP VIEWER](#)*****

FLOW: SOURCE: Gravyard Canyon

COUNTY: Carbon COMMON DESCRIPTION:

POINT OF DIVERSION -- POINT TO POINT:

(1) Stockwatering directly on stream from a point at N 660 ft. W 660 ft. from SE corner, Sec 01, T14S, R13E, S1B1M,
to a point at N 660 ft. W 660 ft. from SE corner, Sec 01, T14S, R13E, S1B1M.
COMMENT: Administratively updated by State Engineer.
SOURCE: Graveyard Canyon

USES OF WATER RIGHT***** ELU -- Equivalent Livestock Unit (cow, horse, etc.) ***** EDU -- Equivalent Domestic Unit or 1 Family

SUPPLEMENTAL GROUP NO.: **615399**. Water Rights Appurtenant to the following use(s):

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Please be aware that the claim under this Water Right Number has NOT been established in accordance with statute and its validity is in question. Therefore, CAUTION is advised when relying upon this record!!!

(WARNING: Water Rights makes NO claims as to the accuracy of this data.) RUN DATE: 01/26/2011

WATER RIGHT: 91-4756

APPLICATION/CLAIM NO.:

CERT. NO.:

OWNERSHIP*****

NAME: Price Field Office USA Bureau of Land Management

ADDR: Moab District

125 South 600 West

Price UT 84501

INTEREST: 100%

REMARKS:

DATES, ETC.*****

LAND OWNED BY APPLICANT?

COUNTY TAX ID#:

FILED:

PRIORITY: / /1869 PUB BEGAN:

PUB ENDED:

NEWSPAPER:

ProtestEnd:

PROTESTED: [No]

HEARING HLD:

SE ACTION: [

ActionDate:

PROOF DUE:

EXTENSION:

ELEC/PROOF: [

ELEC/PROOF:

CERT/WUC:

LAP, ETC:

LAPS LETTER:

RUSH LETTR:

RENOVATE:

RECON REQ:

TYPE: [

]

PD BOOK: [91-

MAP: [57

PUB DATE:

*TYPE -- DOCUMENT -- STATUS--

Type of Right: Pending Adjudication Claim

Source of Info: Water User's Claim

Status:

LOCATION OF WATER RIGHT*** (Points of Diversion: Click on Location to access PLAT Program.)*****MAP VIEWER*****

FLOW:

SOURCE: Hanging Rock Canyon

COUNTY: Carbon

COMMON DESCRIPTION:

POINT OF DIVERSION -- POINT TO POINT:

(1) Stockwatering directly on stream from a point at N 660 ft. E 1980 ft. from W4 corner, Sec 01, T14S, R13E, SLBM,
to a point at S 660 ft. E 1980 ft. from W4 corner, Sec 01, T14S, R13E, SLBM.

COMMENT: Administratively updated by State Engineer.

SOURCE: Hanging Rock Canyon

USES OF WATER RIGHT***** ELU -- Equivalent Livestock Unit (cow, horse, etc.) ***** EDU -- Equivalent Domestic Unit or 1 Family

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Please be aware that the claim under this Water Right Number has NOT been established in accordance with statute and its validity is in question. Therefore, CAUTION is advised when relying upon this record!!!

(WARNING: Water Rights makes NO claims as to the accuracy of this data.) RUN DATE: 01/26/2011

WATER RIGHT: 91-4757 APPLICATION/CLAIM NO.: CERT. NO.:

OWNERSHIP*****

NAME: Price Field Office USA Bureau of Land Management

ADDR: Moab District
125 South 600 West
Price UT 84501

INTEREST: 100% REMARKS:

DATES, ETC.*****

LAND OWNED BY APPLICANT?	COUNTY TAX ID#:
FILED:	PRIORITY: / 1869
PROTEST END:	PROTESTED: [No]
EXTENSION:	ELEC/PROOF: []
RUSH LETTR:	RENOVATE: []
PD BOOK: [91-	MAP: [57]
	PUB DATE:

*TYPE -- DOCUMENT -- STATUS
Type of Right: Pending Adjudication Claim Source of Info: Water User's Claim Status:

LOCATION OF WATER RIGHT***(Points of Diversion: Click on Location to access PLAT Program.)*****MAP VIEWER*****

FLOW: SOURCE: Spring Canyon
COUNTY: Carbon COMMON DESCRIPTION:

POINT OF DIVERSION -- POINT TO POINT:

(1) Stockwatering directly on stream from a point at S 660 ft. E 660 ft. from NW corner, Sec 01, T14S, R13E, SLBM,
to a point at N 660 ft. E 660 ft. from W4 corner, Sec 01, T14S, R13E, SLBM.
COMMENT: Administratively updated by State Engineer.
SOURCE: Spring Canyon

USES OF WATER RIGHT***** ELU -- Equivalent Livestock Unit (cow, horse, etc.) ***** EDU -- Equivalent Domestic Unit or 1 Family

SUPPLEMENTAL GROUP NO.: 615399. Water Rights Appurtenant to the following use(s):

91-4523(PAC), 4524(PAC), 4525(PAC), 4753(PAC), 4754(DIL),
4755(PAC), 4756(PAC), 4757(PAC), 4758(PAC), 4759(PAC),
4760(PAC), 4761(PAC), 4762(PAC), 4763(PAC), 4764(PAC),
4765(PAC), 4780(PAC)STOCKWATER: Sole Supply: UNEVALUATED ELUS Group Total: 116.0000 Div Limit: PERIOD OF USE: 01/01 TO 12/31
Sheep Canyon AllotmentWILDLIFE: 395 Deer, 77 Elk PERIOD OF USE: 01/01 TO 12/31
Acre Feet Contributed by this Right for this Use: Unevaluated
Sheep Canyon Allotment

PLACE OF USE for STOCKWATERING*****

NORTH-WEST ^{1/4}	NORTH-EAST ^{1/4}	SOUTH-WEST ^{1/4}	SOUTH-EAST ^{1/4}
NW NE SW SE	NW NE SW SE	NW NE SW SE	NW NE SW SE

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Please be aware that the claim under this Water Right Number has NOT been established in accordance with statute and its validity is in question. Therefore, CAUTION is advised when relying upon this record!!!

(WARNING: Water Rights makes NO claims as to the accuracy of this data.) RUN DATE: 01/26/2011

WATER RIGHT: 91-4797

APPLICATION/CLAIM NO.:

CERT. NO.:

OWNERSHIP*****

NAME: Ralph Stevenson
ADDR: P.O. Box 52
Wellington UT 84542

NAME: Glen Wells
ADDR: P.O. Box 52
Wellington UT 84542

DATES, ETC.*****

LAND OWNED BY APPLICANT? COUNTY TAX ID#:
FILED: 04/05/1988 PRIORITY: / /1869 PUB BEGAN: PUB ENDED: NEWSPAPER:
ProtestEnd: |PROTESTED: {No } |HEARNG HLD: |SE ACTION: { } |ActionDate: |PROOF DUE:
EXTENSION: |ELEC/PROOF: { } |ELEC/PROOF: |CERT/WUC: 04/05/1988 |LAP, ETC: |LAPS LETTER:
RUSH LETTR: |RENOVATE: |RECON REQ: |TYPE: { }
PD BOOK: [91-] |MAP: [57] |PUB DATE:
*TYPE -- DOCUMENT -- STATUS--

Type of Right: Pending Adjudication Claim Source of Info: Water User's Claim Status:

LOCATION OF WATER RIGHT*** (Points of Diversion: Click on Location to access PLAT Program.) *****MAP VIEWER*****

FLOW: SOURCE: Unnamed Stream
COUNTY: Carbon COMMON DESCRIPTION:

POINT OF DIVERSION -- POINT TO POINT:

(1) Stockwatering directly on stream from a point at N 660 ft. E 660 ft. from S4 corner, Sec 34, T13S, R13E, SLBM,
to a point at N 660 ft. W 660 ft. from S4 corner, Sec 34, T13S, R13E, SLBM.
COMMENT: Administratively updated by State Engineer.
SOURCE: Unnamed Stream

USES OF WATER RIGHT***** ELU -- Equivalent Livestock Unit (cow, horse, etc.) ***** EDU -- Equivalent Domestic Unit or 1 Family

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Please be aware that the claim under this Water Right Number has NOT been established in accordance with statute and its validity is in question. Therefore, CAUTION is advised when relying upon this record!!!

(WARNING: Water Rights makes NO claims as to the accuracy of this data.) RUN DATE: 01/26/2011

WATER RIGHT: 91-4798

APPLICATION/CLAIM NO.:

CERT. NO.:

OWNERSHIP*****

NAME: Ralph Stevenson
 ADDR: PO Box 52
 Wellington, Utah 84542
 INTEREST: 50% REMARKS:

NAME: Glen Wells
 ADDR: PO Box 52
 Wellington, Utah 84542
 INTEREST: 50% REMARKS:

DATES, ETC.*****

LAND OWNED BY APPLICANT? Yes COUNTY TAX ID#:
 FILED: PRIORITY: / /1869|PUB BEGAN: |PUB ENDED: |NEWSPAPER:
 ProtestEnd: |PROTESTED: [No]|HEARNG HLD: |SE ACTION: []|ActionDate: |PROOF DUE:
 EXTENSION: |ELEC/PROOF: []|ELEC/PROOF: |CERT/WUC: 02/22/1990|LAP, ETC: |LAPS LETTER:
 RUSH LETTR: |RENOVATE: |RECON REQ: |TYPE: []
 PD BOOK: [91-]|MAP: [57]|PUB DATE:
 *TYPE -- DOCUMENT -- STATUS--
 Type of Right: Pending Adjudication Claim Source of Info: Water User's Claim Status:

LOCATION OF WATER RIGHT*** (Points of Diversion: Click on Location to access PLAT Program.)*****MAP VIEWER*****

FLOW: 0.015 cfs SOURCE: Unnamed Spring
 COUNTY: Carbon COMMON DESCRIPTION: 7 miles NNW of Sunnyside

POINT OF SPRING:

(1) S 1980 ft W 660 ft from NE cor. Sec 33, T 13S, R 13E, SLBM
 Diverting Works:

Source:

USES OF WATER RIGHT***** ELU -- Equivalent Livestock Unit (cow, horse, etc.) ***** EDU -- Equivalent Domestic Unit or 1 Family

SUPPLEMENTAL GROUP NO.: 615674. Water Rights Appurtenant to the following use(s):
 91-1717 (DIL), 1719 (DIL), 1720 (DIL), 1721 (DIL), 1722 (DIL)
 1724 (DIL), 1725 (DIL), 1726 (DIL), 3253 (DIL), 4795 (PAC)
 4796 (PAC), 4797 (PAC), 4798 (PAC)

STOCKWATER: Sole Supply: UNEVALUATED ELUs Group Total: 120.0000 Div Limit: PERIOD OF USE: 04/15 TO 10/31

PLACE OF USE for STOCKWATERING*****

	NORTH-WEST ^{1/4}	NORTH-EAST ^{1/4}	SOUTH-WEST ^{1/4}	SOUTH-EAST ^{1/4}
	NW NE SW SE	NW NE SW SE	NW NE SW SE	NW NE SW SE
Sec 33 T 13S R 13E SLBM	* : : *	* : : X*	* : : *	* : : *

*****E N D O F D A T A*****



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Select Related Information

(WARNING: Water Rights makes NO claims as to the accuracy of this data.) RUN DATE: 01/26/2011 Page 1

EXCHANGE: **E998 (91-4862)** BASE WATER RIGHT: - STOCK/CONTRACT NUMBER: COUNTY TAX ID#:
 RIGHT EVIDENCED BY: Price River Water Users Association, Stock Certificate, 2339

OWNERSHIP*****

NAME: Roy O. Crum
 ADDR: 3636 South 2400 East
 Salt Lake City UT 84109

NAME: Leith M. Seeley
 ADDR: 3636 South 2400 East
 Salt Lake City UT 84109

DATES, ETC.*****

FILED: 05/06/1976|PRIORITY: 05/06/1976|ADV BEGAN: |ADV ENDED: |NEWSPAPER: No Adv Required
 ProtestEnd: |PROTESTED: (No) |HEARING HLD: |SE ACTION: [Rejected]|ActionDate:02/09/2007|PROOF DUE:
 EXTENSION: |ProofFiled: |CertIssued: |LAP, ETC: 02/09/2007|LAPS LETTR: |RUSH LETTER:
 RENOVATE: |RECON REQ: |TYPE: []

Date Verified: 01/30/2007 Initials: SLAWRENC Status: Rejected
 Related Distribution System: Not part of any Distribution System

*****C U R R E N T R I G H T*****

FLOW: 1.00 acre-feet
 SOURCE: Scofield Reservoir
 COUNTY: Carbon

POINT OF DIVERSION -- SURFACE:

(1) N 810 ft W 990 ft from SE cor, Sec 10, T 12S, R 7E, SLBM

Diverting Works:

Source: Scofield Reservoir

NATURE OF USE:

###MISCELLANEOUS

PERIOD OF USE: 01/01 TO 12/31

*****P R O P O S E D E X C H A N G E*****

FLOW: 1.00 acre-feet
 SOURCE: Underground Water Well
 COUNTY: Carbon

PERIOD OF USE: 01/01 TO 12/31

COMMON DESCRIPTION:

LOCATION OF EXCHANGE***(Points of Diversion: Click on Location to access PLAT Program.)*****MAP VIEWER*****

POINT OF EXCHANGE -- UNDERGROUND: (Click link for PLAT data, click Well ID# link for more well data.)

(1) S 3940 ft W 555 ft from NE cor, Sec 09, T 11S, R 7E, SLBM

DIAMETER OF WELL: 6 ins. DEPTH: 100 to 150 ft. YEAR DRILLED: WELL LOG? NO WELL ID#:

POINT OF RELEASE:

FLOW: 1.00 acre-feet

PERIOD OF USE: 04/01 TO 10/15

NATURE OF USE:

SUPPLEMENTAL GROUP NO. 615734.

DOMESTIC: Sole Supply: UNEVALUATED EDUs Group Total: 1.0000 Div Limit: PERIOD OF USE: 01/01 TO 12/31

###PLACE OF USE: *-----NORTH WEST QUARTER-----*-----NORTH EAST QUARTER-----*-----SOUTH WEST QUARTER-----*-----SOUTH EAST
 * NW | NE | SW | SE * NW | NE | SW | SE * NW | NE | SW | SE * NW | NE |
 Sec 09 T 11S R 7E SLBM * | | | | * | | | | * | | | | *X |X |X

SEGREGATION HISTORY*****

This Exchange as originally filed:

FLOW IN CFS	QUANTITY IN ACRE-Feet	IRRIGATED ACREAGE	STOCK (ELUs)	DOMESTIC (FAMILIES)	MUNICIPAL	MINING	POWER	OTHER
1.0				1.0000				

*****E N D O F D A T A*****

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Select Related Information

Please be aware that the claim under this Water Right Number has NOT been established in accordance with statute and its validity is in question. Therefore, CAUTION is advised when relying upon this record!!!

(WARNING: Water Rights makes NO claims as to the accuracy of this data.) RUN DATE: 01/26/2011

WATER RIGHT: 91-4947 APPLICATION/CLAIM NO.: CERT. NO.:

OWNERSHIP*****

NAME: Sunnyside Coal Company
ADDR: 1113 Spruce Street
Boulder CO 80302
INTEREST: 100% REMARKS:

DATES, ETC.*****

LAND OWNED BY APPLICANT? COUNTY TAX ID#:
FILED: 09/17/1993 PRIORITY: / /1869 PUB BEGAN: PUB ENDED: NEWSPAPER:
ProtestEnd: [PROTESTED: [No] HEARNG HLD: SE ACTION: [] ActionDate: PROOF DUE:
EXTENSION: ELEC/PROOF: [] ELEC/PROOF: CERT/WUC: LAP, ETC: LAPS LETTER:
RUSH LETTR: RENOVATE: RECON REQ: TYPE: []
PD BOOK: [91-] MAP: [57] PUB DATE:

TYPE -- DOCUMENT -- STATUS--

Type of Right: Pending Adjudication Claim Source of Info: Water User's Claim Status:

LOCATION OF WATER RIGHT***(Points of Diversion: Click on Location to access PLAT Program.)*****MAP VIEWER*****

FLOW: 0.009 cfs SOURCE: Unnamed Spring
COUNTY: Carbon COMMON DESCRIPTION:

POINT OF DIVERSION -- SURFACE:
(1) N 500 ft W 800 ft from SE cor, Sec 12, T 14S, R 13E, SLBM
Diverting Works:

Source:

Stream Alt Required?: No

USES OF WATER RIGHT***** ELU -- Equivalent Livestock Unit (cow, horse, etc.) ***** EDU -- Equivalent Domestic Unit or 1 Family

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Select Related Information

Please be aware that the claim under this Water Right Number has NOT been established in accordance with statute and its validity is in question. Therefore, **CAUTION** is advised when relying upon this record!!!

(WARNING: Water Rights makes NO claims as to the accuracy of this data.) RUN DATE: 01/26/2011

WATER RIGHT: **91-4948**

APPLICATION/CLAIM NO.:

CERT. NO.:

OWNERSHIP*****

NAME: Sunnyside Coal Company

ADDR: 1113 Spruce Street

Boulder CO 80302

INTEREST: 100%

REMARKS:

DATES, ETC.*****

LAND OWNED BY APPLICANT?

COUNTY TAX ID#:

FILED: 09/17/1993|PRIORITY: / /1869|PUB BEGAN:

|PUB ENDED:

|NEWSPAPER:

ProtestEnd: |PROTESTED: [No]|HEARNG HLD:

|SE ACTION: []

|ActionDate:

|PROOF DUE:

EXTENSION: |ELEC/PROOF:[]|ELEC/PROOF:

|CERT/WUC:

|LAP, ETC:

|LAPS LETTER:

RUSH LETTR: |RENOVATE: |RECON REQ:

|TYPE: []

PD BOOK: [91-]|MAP: [58c]|PUB DATE:

*TYPE -- DOCUMENT -- STATUS--

Type of Right: Pending Adjudication Claim

Source of Info: Water User's Claim

Status:

LOCATION OF WATER RIGHT***(Points of Diversion: Click on Location to access PLAT Program.)*****[MAP VIEWER](#)*****

FLOW: 0.009 cfs

SOURCE: Unnamed Spring

COUNTY: Carbon

COMMON DESCRIPTION:

POINT OF DIVERSION -- SURFACE:

(1) N 1020 ft E 1490 ft from SW cor, Sec 18, T 14S, R 14E, SLBM

Diverting Works:

Source:

Stream Alt Required?: No

USES OF WATER RIGHT***** ELU -- Equivalent Livestock Unit (cow, horse, etc.) ***** EDU -- Equivalent Domestic Unit or 1 Family

SUPPLEMENTAL GROUP NO.: **615821**. Water Rights Appurtenant to the following use(s):91-98(CERT), 298(DIL), 1635(DIL), 1640(DIL), 2655(DIL)3006(WUC), 3169(DIL), 3458(DIL), 3459(DIL), 3464(DIL)3465(DIL), 3519(WUC), 3520(WUC), 3521(DIL), 3523(DIL)3526(DIL), 3530(DIL), 3532(DIL), 3533(DIL), 3579(DIL)4947(PAC), 4948(PAC)

STOCKWATER: Sole Supply: UNEVALUATED ELUs

Group Total: 900.0000

Div Limit:

PERIOD OF USE: 01/01 to 12/31

*****E N D O F D A T A*****

Utah Division of Water Rights

Select Related Information

(WARNING: Water Rights makes NO claims as to the accuracy of this data.) RUN DATE: 01/26/2011 Page 1

CHANGE: a18518 WATER RIGHT: 91-361 CERT. NO.: COUNTY TAX ID#: AMENDATORY? No
 BASE WATER RIGHTS: 91-361
 RIGHT EVIDENCED BY: 91-361 (a1687; a2682) Cert. a313; a4247 Cert. a531
 Whitmore Decree Civil No. 2573
 CHANGES: Point of Diversion [X], Place of Use [X], Nature of Use [X], Reservoir Storage []

NAME: Sunnyside Cogeneration Associates
 ADDR: Attn: Plant Manager
 P.O. Box 159
 Sunnyside UT 84539
 INTEREST: 100% REMARKS:

FILED: 12/01/1994 PRIORITY: / 1878 ADV BEGAN: 12/22/1994 ADV ENDED: NEWSPAPER: Sun Advocate
 ProtestEnd: 02/04/1995 PROTESTED: [Hear Hel] HEARING HLD: SE ACTION: [Approved] ActionDate: 12/15/1995 PROOF DUE: 02/29/2004
 EXTENSION: ELEC/PROOF: [Proof] ELEC/PROOF: 02/23/2004 CERT/WUC: LAP, ETC: LAPS LETTER:
 RUSH LETTR: RENOVATE: RECON REQ: TYPE: []

Status: Approved

***** HERE TO F O R E *****
 ***** H E R E A F T E R *****

FLOW: 0.5 cfs	FLOW: 0.5 cfs
SOURCE: Grassy Trail Creek	SOURCE: Grassy Trail Creek
COUNTY: Carbon	COUNTY: Carbon COM DESC: Sunnyside
HEREFTER PARAGRAPH 21: PURPOSE AND EXTENT OF USE: Sunnyside & East Carbon Cities & within their distribution system boundaries. EXPLANATORY: See also State Engineer's Decision in TCA 93-91-04. See attached Exhibits A, B, and C.	

POINT(S) OF DIVERSION -----> [MAP VIEWER](#)

Point Surface: (1) S 2824 ft W 1166 ft from N4 cor, Sec 07, T 14S, R 14E, SLBM Dvrting Wks: Source:	CHANGED AS FOLLOWS: (Click Location link for WRPLAT) Point Surface: (1) S 2824 ft W 1166 ft from N4 cor, Sec 07, T 14S, R 14E, SLBM Dvrting Wks: Source:
(2) S 1163 ft W 644 ft from NE cor, Sec 18, T 14S, R 14E, SLBM Dvrting Wks: Source:	(2) S 1163 ft W 644 ft from NE cor, Sec 18, T 14S, R 14E, SLBM Dvrting Wks: Source:
(3) N 1521 ft W 1983 ft from SE cor, Sec 29, T 14S, R 14E, SLBM Dvrting Wks: Source:	(3) N 1521 ft W 1983 ft from SE cor, Sec 29, T 14S, R 14E, SLBM Dvrting Wks: Source:
(4) S 1013 ft E 125 ft from W4 cor, Sec 01, T 15S, R 13E, SLBM Dvrting Wks: Source:	(4) S 1013 ft E 125 ft from W4 cor, Sec 01, T 15S, R 13E, SLBM Dvrting Wks: Source:
(5) N 1604 ft E 1245 ft from SW cor, Sec 02, T 15S, R 13E, SLBM Dvrting Wks: Source:	(5) N 1604 ft E 1245 ft from SW cor, Sec 02, T 15S, R 13E, SLBM Dvrting Wks: Source:
(6) N 750 ft W 1345 ft from SE cor, Sec 03, T 15S, R 13E, SLBM Dvrting Wks: Source:	(6) N 750 ft W 1345 ft from SE cor, Sec 03, T 15S, R 13E, SLBM Dvrting Wks: Source:
(7) S 566 ft E 4323 ft from NW cor, Sec 09, T 15S, R 13E, SLBM Dvrting Wks: Source:	(7) S 566 ft E 4323 ft from NW cor, Sec 09, T 15S, R 13E, SLBM Dvrting Wks: Source:
(8) S 1149 ft E 1320 ft from NW cor, Sec 09, T 15S, R 13E, SLBM Dvrting Wks: Source:	(8) S 1149 ft E 1320 ft from NW cor, Sec 09, T 15S, R 13E, SLBM Dvrting Wks: Source:
(9) N 91 ft E 2390 ft from W4 cor, Sec 06, T 15S, R 14E, SLBM Dvrting Wks: Source:	(9) N 91 ft E 2390 ft from W4 cor, Sec 06, T 15S, R 14E, SLBM Dvrting Wks: Source:

Point Rediversion:

Point Rediversion:
 (1) N 1740 ft E 1230 ft from SW cor, Sec 06, T 15S, R 14E, SLBM
 Dvrting Wks: Dragerton Reservoir
 Source:
 (2) N 1480 ft E 1495 ft from SW cor, Sec 06, T 15S, R 14E, SLBM
 Dvrting Wks: SCA Reservoir
 Source:

PLACE OF USE ----->

CHANGED as follows:

--NW4-- --NE4-- --SW4-- --SE4--
 |N N S S| |N N S S| |N N S S| |N N S S|

--NW4-- --NE4-- --SW4-- --SE4--
 |N N S S| |N N S S| |N N S S| |N N S S|

Sec 24 T 15S R 12E SLBM	W E W E | W E W E | W E W E | W E W E |	Sec 24 T 15S R 12E SLBM	W E W E | W E W E | W E W E | W E W E |
Sec 25 T 15S R 12E SLBM	* : : : * X : : X * : : * X : : X *	Sec 25 T 15S R 12E SLBM	* : : : * X : : X * : : * X : : X *
Sec 01 T 15S R 13E SLBM	* : : : * X : : X * : : * X : : X *	Sec 01 T 15S R 13E SLBM	* : : : * X : : X * : : * X : : X *
Sec 02 T 15S R 13E SLBM	* : : : * X : : X * : : * X : : X *	Sec 02 T 15S R 13E SLBM	* : : : * X : : X * : : * X : : X *
Sec 03 T 15S R 13E SLBM	* : : : * X : : X * : : * X : : X *	Sec 03 T 15S R 13E SLBM	* : : : * X : : X * : : * X : : X *
Sec 07 T 15S R 13E SLBM	* : : : * X : : X * : : * X : : X *	Sec 07 T 15S R 13E SLBM	* : : : * X : : X * : : * X : : X *
Sec 08 T 15S R 13E SLBM	* : : : * X : : X * : : * X : : X *	Sec 08 T 15S R 13E SLBM	* : : : * X : : X * : : * X : : X *
Sec 10 T 15S R 13E SLBM	* : : : * X : : X * : : * X : : X *	Sec 09 T 15S R 13E SLBM	* : : : * X : : X * : : * X : : X *
Sec 11 T 15S R 13E SLBM	* : : : * X : : X * : : * X : : X *	Sec 10 T 15S R 13E SLBM	* : : : * X : : X * : : * X : : X *
Sec 17 T 15S R 13E SLBM	* : : : * X : : X * : : * X : : X *	Sec 11 T 15S R 13E SLBM	* : : : * X : : X * : : * X : : X *
Sec 18 T 15S R 13E SLBM	* : : : * X : : X * : : * X : : X *	Sec 15 T 15S R 13E SLBM	* : : : * X : : X * : : * X : : X *
Sec 19 T 15S R 13E SLBM	* : : : * X : : X * : : * X : : X *	Sec 16 T 15S R 13E SLBM	* : : : * X : : X * : : * X : : X *
Sec 30 T 15S R 13E SLBM	* : : : * X : : X * : : * X : : X *	Sec 17 T 15S R 13E SLBM	* : : : * X : : X * : : * X : : X *
Sec 06 T 15S R 14E SLBM	* : : : * X : : X * : : * X : : X *	Sec 18 T 15S R 13E SLBM	* : : : * X : : X * : : * X : : X *
Sec 17 T 15S R 14E SLBM	* : : : * X : : X * : : * X : : X *	Sec 19 T 15S R 13E SLBM	* : : : * X : : X * : : * X : : X *
Sec 18 T 15S R 14E SLBM	* : : : * X : : X * : : * X : : X *	Sec 30 T 15S R 13E SLBM	* : : : * X : : X * : : * X : : X *
		Sec 06 T 15S R 14E SLBM	* : : : * X : : X * : : * X : : X *
		Sec 17 T 15S R 14E SLBM	* : : : * X : : X * : : * X : : X *
		Sec 18 T 15S R 14E SLBM	* : : : * X : : X * : : * X : : X *

NATURE OF USE ----->	CHANGED as follows:
IRR = values are in acres.	
STK = values are in ELUs meaning Cattle or Equivalent.	
DOM = values are in EDUs meaning Equivalent Domestic Units (F	
SUPPLEMENTAL to Other Water Rights: Yes	SUPPLEMENTAL to Other Water Rights: Yes
IRR: 932.4000 acres. USED 04/01 - 10/15	IRR: 25.0000 and 932.4000 Supp acres USED 04/01 - 10/15
DOM: 875.0000 Equivalent Domestic Units. USED 01/01 - 12/31	
MUN: Sunnyside USED 01/01 - 12/31	MUN: Sunnyside USED 01/01 - 12/31
	MUN: East Carbon USED 01/01 - 12/31
	MIN: District: Sunnyside USED 01/01 - 12/31
	Name: SS, HC & Columbia
	Ores: Coal
	POW: Name: SCA USED 01/01 - 12/31
	A Steam Generation Power Plant, Rated at 58 MW
OTH: INDUSTRIAL: Coal Mining - Horse Canyon, Sunnyside and Columbia Mines USED 01/01 - 12/31	OTH: OTHER: Road Maintenance, Soil Compaction, Dust Suppression USED 01/01 - 12/31

RESERVOIR STORAGE -->	SAME AS HERETOFORE
Storage 03/15 to 12/15, in Grassy Trail Reservoir with a maximum capacity of 916.000 acre-feet, located in:	Storage 03/15 to 12/15, in Grassy Trail Reservoir with a maximum capacity of 916.000 acre-feet, located in:
Height of Dam: 89 ft | N N S S | N N S S | N N S S | N N S S |	Height of Dam: 89 ft | N N S S | N N S S | N N S S | N N S S |
Area Inundat 29.000 acs | W E W E | W E W E | W E W E | W E W E |	Area Inundat 29.000 acs | W E W E | W E W E | W E W E | W E W E |
Sec 07 T 14S R 14E SLBM *X:X:X*X* : : *X:X: * : : *	Sec 07 T 14S R 14E SLBM *X:X:X*X* : : *X:X: * : : *
	Storage 01/01 to 12/31, in SCA Reservoir with a maximum capacity of 125.000 acre-feet, located in:
	Height of Dam: 25 ft | N N S S | N N S S | N N S S | N N S S |
	Area Inundat 7.600 acs | W E W E | W E W E | W E W E | W E W E |
	Sec 06 T 15S R 14E SLBM * : : * : : * X : : X * : : *
	Storage 01/01 to 12/31, in Dragerton Reservoir with a maximum capacity of 52.000 acre-feet, located in:
	Height of Dam: 20 ft | N N S S | N N S S | N N S S | N N S S |
	Area Inundat 4.100 acs | W E W E | W E W E | W E W E | W E W E |
	Sec 06 T 15S R 14E SLBM * : : * : : * X : : X * : : *
	Small Dam Permit Required?: No

PROTESTANTS*****

NAME: Bureau of Land Management
 ADDR: 324 South State Street, Suite 301
 Salt Lake City UT 84111

NAME: City of East Carbon
 ADDR: c/o L. Paul Clark, Mayor
 200 Park Place
 East Carbon UT 84520

NAME: Paul B. Martinez
 ADDR: 95 South 100 East
 Price UT 84501

NAME: Office of the Regional Solicitor
 ADDR: Intermountain Region
 6201 Federal Building, 125 South State Street
 Salt Lake City UT 84138

NAME: Price River Resource Area
 ADDR: Area Manager

NAME:
 ADDR:

900 North 700 East
Price UT 84501

*
EXTENSIONS OF TIME WITHIN WHICH TO FILE PROOF*****
*
FILED: 02/26/1999|PUB BEGAN: |PUB ENDED: |NEWSPAPER:
ProtestEnd: |PROTESTED: [No] |HEARNG HLD: |SE ACTION: [Approved]|ActionDate:03/11/1999|PROOF DUE: 02/28/2004

*****E N D O F D A T A*****

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(WARNING: Water Rights makes NO claims as to the accuracy of this data.) RUN DATE: 01/26/2011 Page 1

CHANGE: a18520 WATER RIGHT: 91-372 CERT. NO.: COUNTY TAX ID#: AMENDATORY? No

BASE WATER RIGHTS: 91-372
RIGHT EVIDENCED BY: 91-372 (a4245) Cert. a556
Whitmore Decree Civil No. 2573

CHANGES: Point of Diversion [X], Place of Use [X], Nature of Use [X], Reservoir Storage [].

NAME: Sunnyside Cogeneration Associates
ADDR: c/o Brian Burnett, Callister Nebeker & McCullough
10 East South Temple, Ste. 900
Salt Lake City, UT 84133

INTEREST: 100% REMARKS:

FILED: 12/01/1994 PRIORITY: / 1885 ADV BEGAN: 12/22/1994 ADV ENDED: NEWSPAPER: Sun Advocate
ProtestEnd: 02/04/1995 PROTESTED: [Hear Hel] HEARING HLD: SE ACTION: [Approved] ActionDate: 12/15/1995 PROOF DUE: 12/31/2009
EXTENSION: ELEC/PROOF: [Proof] ELEC/PROOF: 12/24/2009 CERT/WUC: LAP, ETC: LAPS LETTER:
RUSH LETTR: RENOVATE: RECON REQ: TYPE: []

Status: Approved

*****H E R E T O F O R E*****
*****H E R E A F T E R*****

FLOW: 5.575 cfs	FLOW: 5.575 cfs
SOURCE: Grassy Trail Creek	SOURCE: Grassy Trail Creek
COUNTY: Carbon	COUNTY: Carbon COM DESC: Sunnyside
	HEREAFTER PARAGRAPH 21: Municipal: Sunnyside and East Carbon Cities & within their distribution system.
	EXPLANATORY: See State Engineer's Decision TCA 93-91-06.

POINT(S) OF DIVERSION -----> MAP VIEWER

Point Surface:	CHANGED AS FOLLOWS: (Click Location link for WRPLAT)
(1) S 2824 ft W 1166 ft from N4 cor, Sec 07, T 14S, R 14E, SLBM	Point Surface: (1) S 2824 ft W 1166 ft from N4 cor, Sec 07, T 14S, R 14E, SLBM
Dvrtng Wks:	Dvrtng Wks:
Source:	Source:
(2) S 1163 ft W 644 ft from NE cor, Sec 18, T 14S, R 14E, SLBM	(2) S 1163 ft W 644 ft from NE cor, Sec 18, T 14S, R 14E, SLBM
Dvrtng Wks:	Dvrtng Wks:
Source:	Source:
(3) N 1521 ft W 1983 ft from SE cor, Sec 29, T 14S, R 14E, SLBM	(3) N 1521 ft W 1983 ft from SE cor, Sec 29, T 14S, R 14E, SLBM
Dvrtng Wks:	Dvrtng Wks:
Source:	Source:
(4) S 1013 ft E 125 ft from W4 cor, Sec 01, T 15S, R 13E, SLBM	(4) S 1013 ft E 125 ft from W4 cor, Sec 01, T 15S, R 13E, SLBM
Dvrtng Wks:	Dvrtng Wks:
Source:	Source:
(5) N 1604 ft E 1245 ft from SW cor, Sec 02, T 15S, R 13E, SLBM	(5) N 1604 ft E 1245 ft from SW cor, Sec 02, T 15S, R 13E, SLBM
Dvrtng Wks:	Dvrtng Wks:
Source:	Source:
(6) N 750 ft W 1345 ft from SE cor, Sec 03, T 15S, R 13E, SLBM	(6) N 750 ft W 1345 ft from SE cor, Sec 03, T 15S, R 13E, SLBM
Dvrtng Wks:	Dvrtng Wks:
Source:	Source:
(7) S 566 ft E 4323 ft from NW cor, Sec 09, T 15S, R 13E, SLBM	(7) S 566 ft E 4323 ft from NW cor, Sec 09, T 15S, R 13E, SLBM
Dvrtng Wks:	Dvrtng Wks:
Source:	Source:
(8) S 1149 ft E 1320 ft from NW cor, Sec 09, T 15S, R 13E, SLBM	(8) S 1149 ft E 1320 ft from NW cor, Sec 09, T 15S, R 13E, SLBM
Dvrtng Wks:	Dvrtng Wks:
Source:	Source:
(9) N 91 ft E 2390 ft from W4 cor, Sec 06, T 15S, R 14E, SLBM	(9) N 91 ft E 2390 ft from W4 cor, Sec 06, T 15S, R 14E, SLBM
Dvrtng Wks:	Dvrtng Wks:
Source:	Source:

Point Rediversion:

	Stream Alt?: No
	Point Rediversion:
	(1) N 1740 ft E 1230 ft from SW cor, Sec 06, T 15S, R 14E, SLBM
	Dvrtng Wks: Dragerton Reservoir
	Source:
	(2) N 1480 ft E 1495 ft from SW cor, Sec 06, T 15S, R 14E, SLBM
	Dvrtng Wks: SCA Reservoir
	Source:

PLACE OF USE ----->

CHANGED as follows:
--NW4-- --NE4-- --SW4-- --SE4-- IN NS S|IN NS S|IN NS S|IN NS S| |W E W E|W E W E|W E W E|W E W E|
* : : * :X* : : * :X* :X*

Sec 24 T 15S R 12E SLBM

```

|Sec 25 T 15S R 12E SLBM * : : : ** :X: : ** : : : ** : : : * |Sec 25 T 15S R 12E SLBM * : : : ** :X: : ** : : : ** : : : *
|Sec 01 T 15S R 13E SLBM * : : : ** : : : **X:X:X:X**X:X:X*X* |Sec 01 T 15S R 13E SLBM * : : : ** : : : **X:X:X:X**X:X:X*X*
|Sec 02 T 15S R 13E SLBM * : : : ** : : : **X:X:X:X**X:X:X*X* |Sec 02 T 15S R 13E SLBM * : : : ** : : : **X:X:X:X**X:X:X*X*
|Sec 03 T 15S R 13E SLBM * : : : ** : : : ** :X:X:X* |Sec 03 T 15S R 13E SLBM * : : : ** : : : ** :X:X:X*
|Sec 07 T 15S R 13E SLBM * : : : ** : : : **X:X:X*X* |Sec 07 T 15S R 13E SLBM * : : : ** : : : **X:X:X*X*
|Sec 08 T 15S R 13E SLBM * :X: :X**X: :X:X**X:X:X**X: :X: * |Sec 08 T 15S R 13E SLBM * :X: :X**X: :X:X**X:X:X**X:X:X*X*
|Sec 10 T 15S R 13E SLBM *X:X:X:X**X:X:X*X** : : : * |Sec 09 T 15S R 13E SLBM * : : : ** : : : **X:X:X:X**X:X:X*X*
|Sec 11 T 15S R 13E SLBM *X: : : ** : : : ** : : : * |Sec 10 T 15S R 13E SLBM *X:X:X:X**X:X:X*X** :X: ** : : : *
|Sec 17 T 15S R 13E SLBM * :X: ** : : : ** : : : * |Sec 11 T 15S R 13E SLBM *X: :X: ** : : : ** : : : *
|Sec 18 T 15S R 13E SLBM * : : :X**X:X:X*X** :X:X:X** : : : * |Sec 15 T 15S R 13E SLBM *X:X:X:X**X:X:X*X**X:X:X: ** : : : *
|Sec 19 T 15S R 13E SLBM *X: : : ** : : : ** :X: ** : : : * |Sec 16 T 15S R 13E SLBM *X: :X: ** : : : ** : : : *
|Sec 30 T 15S R 13E SLBM *X: :X:X** : : : **X:X: : : : * |Sec 17 T 15S R 13E SLBM *X:X:X:X**X:X:X*X**X:X:X: ** : : : *
|Sec 06 T 15S R 14E SLBM * : : : ** : : : **X: :X: : : : * |Sec 18 T 15S R 13E SLBM *X:X:X:X**X:X:X*X** : : : ** : : : *
|Sec 17 T 15S R 14E SLBM * : : : ** : : : **X: :X: : : : * |Sec 19 T 15S R 13E SLBM *X:X:X:X**X:X:X*X** :X: :X** : : : *
|Sec 18 T 15S R 14E SLBM * : : : ** : : : ** :X: :X* |Sec 30 T 15S R 13E SLBM *X: : : ** : : : **X:X: : : : *
|Sec 18 T 15S R 14E SLBM * : : : ** : : : ** :X: :X* |Sec 06 T 15S R 14E SLBM * : : : ** : : : **X:X: :X**X: :X: :X: :X: :X: :X:
|Sec 18 T 15S R 14E SLBM * : : : ** : : : ** :X: :X* |Sec 17 T 15S R 14E SLBM * : : : ** : : : **X: :X: :X**X: :X: :X: :X:
|Sec 18 T 15S R 14E SLBM * : : : ** : : : ** :X: :X* |Sec 18 T 15S R 14E SLBM * : : : ** : : : ** :X: :X*

```

NATURE OF USE ----->		CHANGED as follows:	
IRR = values are in acres.			
STK = values are in ELUs meaning Cattle or Equivalent.			
DOM = values are in EDUs meaning Equivalent Domestic Units (F			
SUPPLEMENTAL to Other Water Rights: Yes		SUPPLEMENTAL to Other Water Rights: Yes	
IRR: 932.4000 acres.	USED 04/01 - 10/15	IRR: 350.0000 and 932.4000 Supp acres	USED 04/01 - 10/15
DOM: 875.0000 Equivalent Domestic Units.	USED 01/01 - 12/31		
MUN: Sunnyside	USED 01/01 - 12/31	MUN: East Carbon	USED 01/01 - 12/31
		MUN: Sunnyside	USED 01/01 - 12/31
		MIN: District: Sunnyside	USED 01/01 - 12/31
		Name: SS, HC, & Columbia	
		Ores: Coal	
		POW: Name: SCA	USED 01/01 - 12/31
		A Steam Generation Power Plant, Rated at 58 MW	
OTH: INDUSTRIAL: Coal Mining -	USED 01/01 - 12/31	OTH: OTHER: Road Maintenance,	USED 01/01 - 12/31
Sunnyside, Columbia, Horse Canyon Mines.		Soil Compaction, Dust Suppression	

RESERVOIR STORAGE -->	SAME AS HERETOFORE
	Storage 01/01 to 12/31, in SCA Reservoir
	with a maximum capacity of 125.000 acre-feet, located in:
	--NW4-- --NE4-- --SW4-- --SE4--
	Height of Dam: 25 ft |N N S S| |N N S S| |N N S S| |N N S S|
	Area Inundat 7.600 acs |W E W E| |W E W E| |W E W E| |W E W E|
	Sec 06 T 15S R 14E SLBM * : : : ** : : : ** :X: :X** : : : *
	Storage 01/01 to 12/31, in Dragerton Reservoir
	with a maximum capacity of 52.000 acre-feet, located in:
	--NW4-- --NE4-- --SW4-- --SE4--
	Height of Dam: 20 ft |N N S S| |N N S S| |N N S S| |N N S S|
	Area Inundat 4.100 acs |W E W E| |W E W E| |W E W E| |W E W E|
	Sec 06 T 15S R 14E SLBM * : : : ** : : : **X: : : ** : : : *
	Small Dam Permit Required?: No

 PROTESTANTS*****

NAME: Bureau of Land Management
 ADDR: 324 South State Street, Suite 301
 Salt Lake City UT 84111

NAME: City of East Carbon
 ADDR: c/o L. Paul Clark, Mayor
 200 Park Place
 East Carbon UT 84520

NAME: Paul B. Martinez
 ADDR: 95 South 100 East
 Price UT 84501

NAME: Office of the Regional Solicitor
 ADDR: Intermountain Region
 6201 Federal Building, 125 South State Street
 Salt Lake City UT 84138

NAME: Price River Resource Area
 ADDR: Area Manager
 900 North 700 East
 Price UT 84501

NAME:
 ADDR:

 EXTENSIONS OF TIME WITHIN WHICH TO FILE PROOF*****

FILED: 02/26/1999|PUB BEGAN: |PUB ENDED: |NEWSPAPER:
 ProtestEnd: |PROTESTED: [No] |HEARING HLD: |SE ACTION: [Approved]|ActionDate:03/11/1999|PROOF DUE: 02/28/2004

FILED: 02/24/2004|PUB BEGAN: |PUB ENDED: |NEWSPAPER: No Adv Required

ProtestEnd: [PROTESTED: {No}] [HEARNG HLD: [SE ACTION: [Approved] | ActionDate: 09/09/2004 | PROOF DUE: 12/31/2009]

*****E N D O F D A T A*****

Utah Division of Water Rights | 1594 West North Temple Suite 220, P.O. Box 146300, Salt Lake City, Utah 84114-6300 | 801-538-7240
[Natural Resources](#) | [Contact](#) | [Disclaimer](#) | [Privacy Policy](#) | [Accessibility Policy](#) | [Emergency Evacuation Plan](#)

APPENDIX 7-6A
1999 and 2010 SEEP 7 SPRING SURVEY DATA

APPENDIX 7-6A

1999 and 2010 SEEP & SPRING SURVEY DATA



PETERSEN HYDROLOGIC, LLC

20 September 2010

Mr. Dave Shaver
West Ridge Resources, Inc.
P.O. Box 1077
Price, Utah 84501

Dave,

At your request, we have performed an inventory of springs and seeps located in the survey area delineated in your previous e-mail correspondence of 17 June 2010. The inventoried area includes portions of Sections 6 and 7, T.14S., R.14E. near Grassy Trail Reservoir in Whitmore Canyon, Utah.

The entirety of this area was previously surveyed for springs and seeps by Mayo and Associates, LC of Lindon, Utah. Mayo and Associates surveyed this area during high-flow conditions in May of 1999 and again during low-flow conditions in November of 1999. A report summarizing the findings of the Mayo and Associates, LC investigation (dated 9 June 2000) was previously submitted to West Ridge Resources by Mayo and Associates. No springs or seeps were identified by Mayo and Associates in the current inventory area in 1999.

As a supplement to the Mayo and Associates investigation, portions of this area (see attached Figure 1) were again inventoried for springs and seeps on 20 August 2010. Prior to the commencement of the field investigation, aerial imagery of the survey area was analyzed to determine likely potential spring and seep discharge areas. The field survey included walking along the canyon margins and observing and photographing the adjacent steep canyon walls. Side canyon areas where there was determined to be an increased potential for the presence of springs and seeps were also traversed by foot. The upper, ridge top and plateau portion of the inventory area was not surveyed as part of the September 2010 survey (this area was previously inventoried by Mayo and Associates (2000).



PETERSEN HYDROLOGIC, LLC

No springs or seeps were identified within the inventory area in the 20 August 2010 spring and seep survey.

Please feel free to contact me should you have any questions in this regard.

Sincerely,



Erik C. Petersen, P.G.
Principal Hydrogeologist
Utah PG No. 5373615-2250

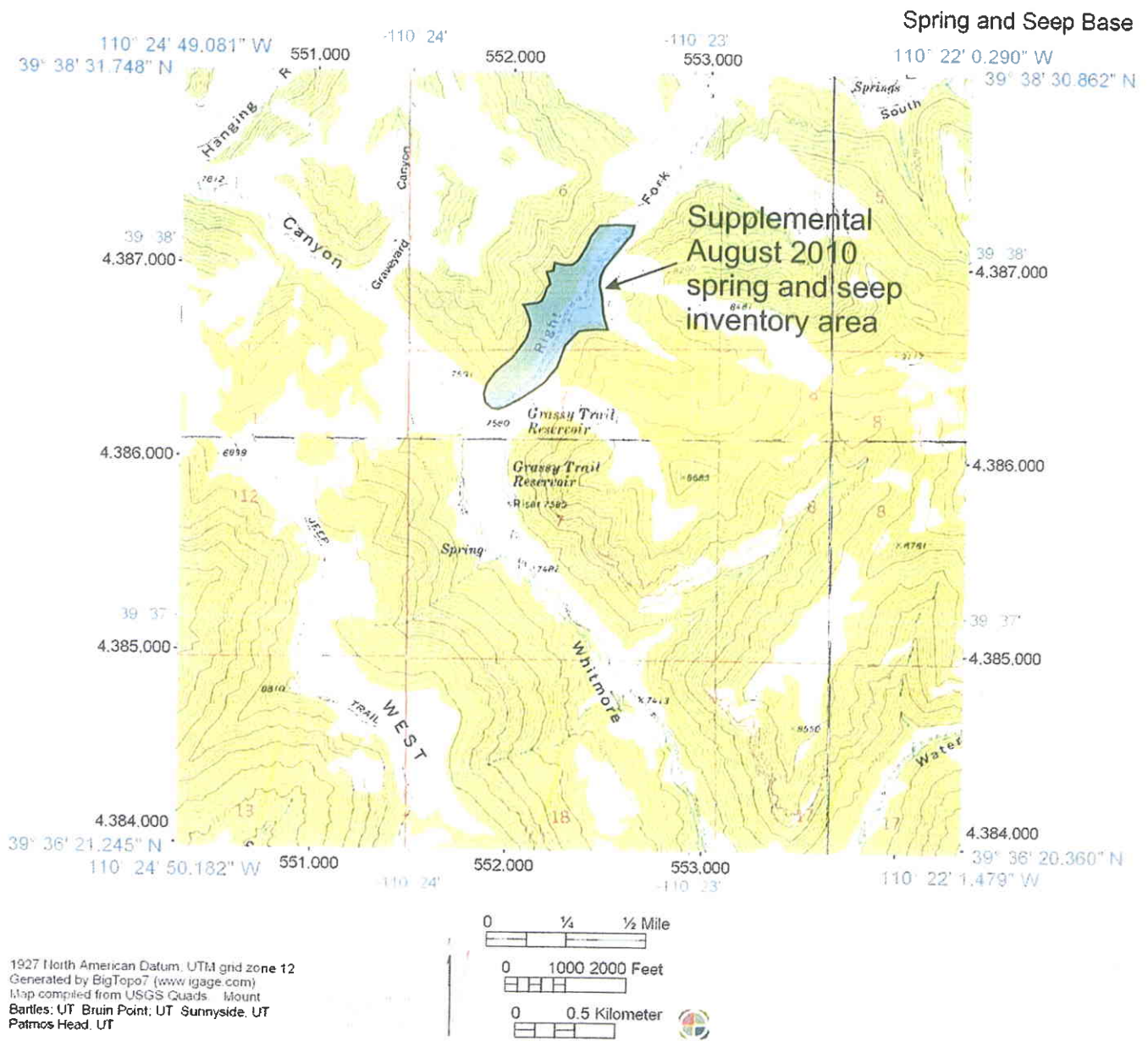


Figure 1 Supplemental August 2010 spring and seep inventory area.

**West Ridge Mine—North Lease
Spring and Seep Survey
November 1999**

WEST RIDGE Resources, West Ridge Mine, Price, Utah

9 June 2000

Mayo and Associates, LC
Consultants in Hydrogeology



**West Ridge Mine—North Lease
Spring and Seep Survey
November 1999**

WEST RIDGE Resources, West Ridge Mine, Price, Utah

9 June 2000

Prepared by:

**Kelly Payne
Hydrogeologist**

**Mayo and Associates, LC
710 East 100 North
Lindon, Utah 84042
(801) 796-0211
(801) 785-2387 (fax)**

Mayo and Associates, LC
Consultants in Hydrogeology



**WEST RIDGE Resources
North Lease Area
Spring and Seep Survey
November 1999**

During November 1999, Mayo and Associates performed a fall (low-flow) spring and seep survey in the North Lease area, which is northeast of the existing West Ridge Mine lease. This fall survey complements the springtime survey performed by Mayo and Associates in May 1999.

All of the springs and seeps identified in the springtime survey were revisited. Eight additional springs were identified during the fall survey, bringing the total number of springs identified in the survey area to 120. Map 1, which shows the boundaries of the survey area and the locations of springs and seeps has been updated to include the new springs. Field parameters (discharge, pH, specific conductivity, and water temperature) were measured at each spring/seep site. Field parameters for both the springtime and fall surveys are reported in Table 1. State Plane coordinates of each spring/seep site are listed in Table 1. State Plane coordinates were obtained using handheld GPS receivers and 1:24,000-scale topographic quadrangles.

The stratigraphic occurrence of each spring is listed in Table 1. The stratigraphic occurrence of each seep and spring is based upon field observations and a geologic map provided by WEST RIDGE Resources.

Spring and seeps located in this survey were numbered using the designations given in previous spring and seep surveys conducted by Kaiser Coal Company in 1985 and 1986. This system uses the prefixes F- or S-. Newly located springs and seeps were numbered in the order they were located in and have the section number as the prefix. Each spring/seep was tagged using aluminum tags with the spring/seep number written on the tag.

In order to help classify ephemeral, intermittent, and perennial reaches of creeks in the survey area, Mayo and Associates has mapped the reaches where flow was observed in the channel in May and November 1999. These reaches are indicated on Map 1.

The locations of ponds are also shown on Map 1. Ponds that are located in Section 36 T13S R13E and Section 12 T14S R13E are natural ponds located at the head of landslide areas. A single man-made pond is found in Section 34 T13S R13E and appears to be runoff fed. Ponds located in this survey were numbered in the order they were located in and have the section number as the prefix, followed by a P for pond.

Electronic files of the data tables (Microsoft Excel 97 format) and the spring and seep location map (AutoCAD Release 14 format) are included.

Table 1 Field parameters and details for springs and seeps surveyed in 1999

West Ridge Spring.xls 6/9/00

Site	Spring 1999				Fall 1999				State Plane'		Stratigraphic Occurrence	Uses
	Flow gpm	Temp. °C	pH	Cond. µS/cm	Flow gpm	Temp. °C	pH	Cond. µS/cm	Easting	Northing		
18-101	seep	11.4	8.1	380	seep	7.7	7.9	775	2313385	467571	Qa	Flows into Grassy Trail Creek
18-102	seep	8.5	8.1	310	seep	8.3	7.6	655	2313448	467549	Qa	Flows into Grassy Trail Creek
8-103	seep	7.0	8.2	370	seep	-0.3	8.2	646	2315291	470099	TKnhh	Wildlife
6-104	1.7	8.1	7.6	510	0.79	8.3	7.7	633	2313861	476633	Qa	Flows into Grassy Trail Creek
6-105	9.2	5.6	7.8	490	4.21	8.8	7.63	678	2313937	476656	Qa	Flows into Right Fork Grassy Trail Creek
6-106	60	4.8	7.6	340	>10	8.3	7.54	767	2313986	476692	Qa	Flows into Right Fork Grassy Trail Creek
6-107	1	4.4	7.7	340	1.28	5.1	7.56	662	2314081	476490	Qa	Livestock
8-108	2	9.0	8.2	500	0.50	2.7	8.2	607	2315678	470359	TKnh	Wildlife
31-109	2	6.4	7.8	560	1.30	6.7	7.1	920	2311598	479786	Tc	Wildlife
31-110	6	6.4	7.8	530	2.14	3.3	7.4	830	2311567	479449	Tc	Wildlife
6-111	1.8	4.8	7.8	500	0.31	6.7	7.4	940	2311490	478928	Tc	Flows into Right Fork Grassy Trail Creek
6-112	1	4.8	8.0	340	dry				2311715	478838	Tc	Flows into Right Fork Grassy Trail Creek
6-113	1.5	4.8	8.0	440	1.50	6.7	7.1	810	2313308	477446	Tc	Flows into Right Fork Grassy Trail Creek
7-115	0.3	12.0	8.1	550	seep	frozen			2309705	473746	Qa	Flows into Grassy Trail Creek
1-116	seep	9.9	7.9	410	dry				2306710	476264	Qa	Flows into Grassy Trail Creek
1-117	17.5	6.7	7.5	702	dry				2305105	477681	Qa	Flows into Grassy Trail Creek
1-118	seep	6.4	7.7	350	seep	1.5	7.6	393	2307519	475503	Qa	Flows into Grassy Trail Creek
35-121	seep	4.8	7.7	540	dry				2295729	481494	Qa	Flows into Grassy Trail Creek
18-200	seep	10.0	7.8	530	dry				2312880	467854	Qa	Flows into Grassy Trail Creek
18-201	0.3	6.4	7.8	1190	dry				2314328	465146	TKnh	Flows into Grassy Trail Creek
7-202	7.5	6.9	7.6	530	2.0	7.6	7.86	430	2311438	469966	Qa	Flows into Grassy Trail Creek
7-203	seep	9.5	7.4	870	0.85	6.1	7.8	809	2311332	469986	Qa	Flows into Grassy Trail Creek
7-204	0.5	7.0	8.0	460	2.6	8.6	8.25	459	2311499	470893	TKnh	Flows into Grassy Trail Creek
12-205	1.2	6.4	7.8	340	0.87	5.5	8.2	496	2308681	472044	Tc	Flows into Grassy Trail Creek
18-206	3	5.5	8.4	360	dry				2310999	466899	Tc	Wildlife
18-207	4	5.7	7.9	340	4.8	5.7	7.96	360	2311102	466452	Tc	Wildlife
7-208	1	3.0	8.2	290	dry				2310231	469574	Tc	Wildlife
36-209	0.7	5.6	8.0	670	0.52	9.9	8.3	1044	2308590	482661	Tc	Wildlife
36-211	3	6.7	7.6	560	dry				2307892	482557	Tc	Wildlife
12-212	seep	11.5	7.7	580	5.0	6.0	7.87	491	2309197	472852	Tc	Wildlife
12-213	0.5	4.1	8.0	400	seep	frozen			2309202	472951	Tc	Wildlife
12-213A	1	6.0	8.0	410	dry				2309055	473033	Tc	Wildlife
12-214	3	9.0	8.6	380	dry				2309038	473136	Tc	Wildlife
7-215	seep	6.4	7.9	580	seep	frozen			2310053	473316	Qa	Flows into Left Fork Grassy Trail Creek
7-216	0.5	4.6	7.5	680	seep	frozen			2309980	473368	Qa	Flows into Left Fork Grassy Trail Creek
7-217	0.5	5.5	7.8	670	seep	frozen			2309916	473428	Qa	Flows into Left Fork Grassy Trail Creek
7-218	seep	8.3	7.8	620	seep	frozen			2309860	473497	Qa	Flows into Left Fork Grassy Trail Creek
7-219	seep	7.7	7.8	600	seep	frozen			2309804	473536	Qa	Flows into Left Fork Grassy Trail Creek
7-220	0.4	4.1	7.5	650	seep	frozen			2309795	473592	Qa	Flows into Left Fork Grassy Trail Creek
1-221	12	5.4	8.3	420	dry				2305073	476470	Tc	Flows into Left Fork Grassy Trail Creek
1-222	2	5.6	8.3	480	dry				2305104	476403	Tc	Wildlife
1-223	12	5.6	7.5	700	dry				2305590	479035	Qa	Wildlife
36-224	0.3	5.4	8.1	635	0.15	4.1	8.4	716	2304771	480540	Tc	Wildlife
36-225	2.5	6.1	8.0	700	0.60	6.0	8.0	725	2304810	480645	Qa	Wildlife
36-226	3	5.7	7.9	720	1.46	6.4	7.7	770	2304693	480964	Tc	Wildlife

Site	Spring 1999				Fall 1999				State Plane ¹		Stratigraphic Occurrence ²	Uses ³
	Flow gpm	Temp. °C	pH	Cond. µS/cm	Flow gpm	Temp. °C	pH	Cond. µS/cm	Easting	Northing		
36-227	15	5.5	7.6	700	dry				2304608	481199	Tc	Wildlife
35-228	1.1	4.6	7.3	1070	0.45		7.9	1091	2303519	482137	Tc	Wildlife
35-229	seep	14.5	7.9	950	dry				2303682	482633	Tc	Wildlife
35-230	seep	13.5	8.4	382	seep	10	7.1	407	2302749	480302	Tc	Wildlife
35-231	0.4	7.0	7.8	760	0.12	6.1	7.2	750	2303786	479285	Tc	Wildlife and cattle
35-232	1.4	5.4	7.8	589	1	5.6	7.8	660	2300776	481464	Tc	Cattle, wildlife
35-300					0.3	6.7	7.2	690	2300495	481496	Tc	Cattle, wildlife
36-301					seep	11.3		720	2308403	482788	Tgr	Wildlife
36-302					0.8	6.5		568	2308322	482788	Tgr	Wildlife
35-303					seep	13	7.3	1260	2303521	482190	Tc	Wildlife
1-304					0.8	3.8	8	379	2309434	476025	Tc	Wildlife
1-305					seep				2308698	474588	Qa	Flows into Grassy Trail Creek
18-306					0.7	4	8.19	760	2312418	467521	Tc	Wildlife
S-70	2	6.7	7.7	490	6.45	6.5		735	2305681	479491	Tc	Wildlife
S-72	2	5.6	7.6	540	0.75	4.9		871	2306700	480691	Tc	Wildlife
S-74	2.4	5.4	7.5	530	1.26	6.5		853	2306900	481133	Tc	Wildlife
S-75	6	6.4	7.6	720	1.88	8.0		892	2308511	482310	Tc	Wildlife
S-76	0.6	6.7	7.8	670	seep	9.2	8.1	1228	2308703	482629	Tc	Wildlife
S-78	4	4.4	7.4	640	seep	1.7	8.24	688	2307201	477905	Tc	Wildlife
S-80	25	5.2	7.4	750	4.3	5.6	8.2	910	2307949	478837	Qa	Wildlife
S-86	0.5	5.9	7.5	340	dry				2306947	476100	Qa	Flows into Grassy Trail Creek
S-97	4	4.6	7.7	370	1.5	6.7	7.1	720	2307128	475766	Tc	Flows into Grassy Trail Creek
S-99	seep	2.8	7.8	450	seep				2309261	475502	Tc	Wildlife
S-100	2	2.7	8.2	380	0.75	3.4	8.1	324	2309573	475984	Tc	Wildlife
S-101	seep	4.0	7.9	360	dry				2309981	476376	Tc	Wildlife
S-102	seep	8.3	8.2	360	dry				2310241	476676	Tc	Wildlife
S-103	seep	8.0	8.2	470	dry				2310394	476882	Tc	Wildlife
S-104	1	6.0	8.0	340	dry				2309273	476524	Tc	Wildlife
S-105	seep	20.6	8.3	360	seep				2309318	477075	Tc	Cattle and wildlife
S-106	0.7	4.6	7.7	360	seep	8.0	7.4	412	2309421	477344	Tc	Wildlife
S-107	1.5	8.0	7.8	380	0.42	6.2	8.1	395	2309386	477604	Tc	Cattle and wildlife
S-108	0.8	6.6	7.9	300	1.18	5.2	8.3	607	2309257	477888	Tc	Cattle and wildlife
S-114	1.3	4.6	7.4	1060	0.37	3.5	8.1	1050	2303598	482448	Tc	Cattle and wildlife
S-115	0.2	7.0	7.5	680	seep	9.0	7.5	1060	2303539	481989	Tc	Wildlife
S-116	6	6.0	7.8	594	6.4	6.7	7.8	633	2305424	478936	Tc	Wildlife
S-118	1.7	7.0	7.8	610	0.12	7.2	6.9	630	2300929	482554	Tc	Cattle and wildlife
S-119	0.5	7.3	7.9	610	seep	8.9	7.0	705	2302862	480238	Tc	Wildlife
S-120	0.6	12.5	8.1	695	seep	4.4	7.1	710	2303305	479784	Tc	Wildlife
S-122	0.5	5.6	8.0	730	seep	4.4	7.8	820	2304141	479052	Tc	Wildlife
S-123	0.4	8.0	7.9	690	seep	7.2	6.9	690	2300750	481855	Tc	Wildlife
S-137	2	5.8	8.1	350	0.94	4.4	7.3	360	2302543	482542	Tc	Wildlife
S-139	seep	10.4	8.4	358	dry				2303198	481190	Qa	Wildlife
S-140	10	5.0	7.8	585	4.6	5.3	8.2	700	2305116	479855	Tc	Wildlife
S-144	0.5	5.7	8.1	690	0.7	5.6	8.8	660	2302316	479124	Tc	Wildlife
S-147	seep	5.7	7.9	472	0.6	3.3	7.2	490	2299195	480717	Tc	Wildlife
S-152	5	4.8	7.7	490	3.04	4.6	7.6	507	2298735	483280	Qa	Wildlife
S-153	seep	4.9	7.8	531	0.27	2.3	8.0	518	2299455	481669	Tc	Wildlife
S-157	0.5	5.0	7.7	529	dry				2299274	482101	Qa	Wildlife
S-159	seep	6.3	8.1	360	seep	0.6	7.9	685	2303630	478396	Tc	Flows into Grassy Trail Creek
S-160	0.5	7.4	8.3	450	1	5.5	7.7	505	2304201	476344	Tc	Wildlife

Site	Spring 1999				Fall 1999				State Plane ¹		Stratigraphic Occurrence ²	Uses
	Flow gpm	Temp. °C	pH	Cond. µS/cm	Flow gpm	Temp. °C	pH	Cond. µS/cm	Eastings	Northings		
S-161	1	7.9	8.7	360	2	2.2	7.9	474	2304439	476457	Tc	Wildlife
S-163	0.3	12.3	8.4	330	0.13	5.5	7.9	530	2305780	474594	Tc	Cattle and wildlife
S-163B					1.15	5.6	7.7	594	2306041	474778	Tc	Cattle and wildlife
S-165	seep	9.1	8.0	440	dry	2.9	7.4	707	2307782	473063	Tc	Wildlife
S-167	1.3	5.6	7.9	350	dry	2.72	7.99	4.92	2306676	474167	Tc	Wildlife
S-168	3	5.5	8.2	350	dry	5.4	8.2	840	2309107	472917	Tc	Wildlife
S-172	2	4.7	8.0	400	dry	5.6	8.2	840	2304871	477577	Tc	Flows into Grassy Trail Creek
S-174	2.5	5.3	8.0	320	dry	3.3	8.3	390	2305217	476958	Qa	Flows into Grassy Trail Creek
S-177	2	5.0	8.3	300	dry	1.4	8.44	380	2308885	469120	Tc	Livestock
S-181	1.5	13.7	8.3	550	1.15	4.1			2310287	471110	Tc	Flows into reservoir
S-182	0.3	9.3	8.0	490	dry				2310304	471368	Tc	Wildlife
S-188	2	4.1	7.7	495	dry				2310810	469668	Tc	Wildlife
S-189	4	4.4	7.5	720	dry				2311917	469427	Qa	Flows into Grassy Trail Creek
S-190	8.6	7.2	7.7	520	4	3.3	8.4	610	2310898	470368	Tc	Flows into Grassy Trail Creek
S-192	3	5.7	8.0	500	1.67	5.7	7.61	868	2308716	473420	Tc	Wildlife
S-193	1.2	5.5	8.0	940	0.92	5.6	7.8	671	2308776	474047	Tc	Wildlife
S-197	0.8	3.7	8.0	520	seep	-0.2	7.9	534	2308802	474506	Qa	Flows into Grassy Trail Creek
S-199	2.5	7.7	8.4	450	seep	frozen			2309795	473660	Tc	Flows into Grassy Trail Creek
S-200	1	7.0	7.9	620	seep	frozen			2310113	473274	Tc	Flows into Grassy Trail Creek
S-203	6	9.1	7.6	360	2.86	7.1	7.6	658	2311337	469986	Qa	Flows into Grassy Trail Creek
S-208	2.4	6.1	7.7	470	2.5	6.7	8.0	707	2310236	469573	TKnh	Flows into Grassy Trail Creek
F-22	0.3	4.5	7.7	340	dry				2310580	468464	Tc	Flows into Grassy Trail Creek
F-23	0.3	5.6	7.7	330	dry				2310462	468573	Tc	Wildlife
F-36	0.6	9.5	8.6	410	dry				2306405	474489	Tc	Wildlife
F-42	seep	12.4	8.1	870	dry				2302834	481819	Tc	Wildlife

¹ Utah State Plane, Central Zone

² Key to abbreviations:

Qa Alluvium Undifferentiated
Tgr Green River Formation
Tc Colton Formation
TKnh North Horn Formation

APPENDIX 7-6A

1999 SEEP/SPRING SURVEY MAP

APPENDIX 7-14
GRASSY TRAIL RESERVOIR, RIGHT FORK
HISTORICAL FLOW DATA

APPENDIX 7-14

GRASSY TRAIL RESERVOIR
RIGHT FORK
HISTORICAL FLOW DATA

Grassy Trial Reservoir - Right Fork			
Historical Flow Data - 3' Parshall Flume			
Date	Right Fork		Comments
	cfs	gpm	
4/19/1962	25.10	11,266	Leon Pressett ⁽¹⁾
5/1/1962	24.60	11,041	Leon Pressett ⁽¹⁾
4/21/1981	5.39	2,419	Leon Pressett ⁽¹⁾
11/13/1981	1.37	615	Leon Pressett ⁽¹⁾
4/26/1982	7.81	3,505	Leon Pressett ⁽¹⁾
5/6/1982	23.60	10,592	Leon Pressett ⁽¹⁾
5/25/1982	17.40	7,810	Leon Pressett ⁽¹⁾
6/17/1983	55.00	24,686	Leon Pressett ⁽¹⁾
7/14/1989	0.48	217	M. Page & R. Wilde ⁽²⁾
9/15/1989	0.32	145	M. Page & R. Wilde ⁽²⁾
3/7/1990	0.28	126	M. Page & R. Wilde ⁽²⁾
4/20/1990	1.05	470	M. Page & R. Wilde ⁽²⁾
5/22/1990	0.78	352	M. Page & R. Wilde ⁽²⁾
6/8/1990	0.88	397	M. Page & R. Wilde ⁽²⁾
6/15/1990	0.63	283	M. Page & R. Wilde ⁽²⁾
8/27/1990	0.09	42	M. Page & R. Wilde ⁽²⁾
9/17/1990	0.17	77	M. Page & R. Wilde ⁽²⁾
11/14/1990	0.16	71	M. Page & R. Wilde ⁽²⁾
4/15/1991	0.45	203	M. Page & R. Wilde ⁽²⁾
5/14/1991	1.68	754	M. Page & R. Wilde ⁽²⁾
9/17/2010	0.14	61	Dana Marrelli - Right Fork ⁽³⁾
11/4/2010	0.37	165	Dana Marrelli - Right Fork ⁽³⁾
1/18/2011	2.15	963	Warren Monroe ⁽⁴⁾

Notes:

- (1) Leon Pressett - East Carbon City Water Master
- (2) M. Page & R. Wilde - Division of Water Rights
- (3) Dana Marrelli - UAE (Flow taken in Right Fork but not from the Flume)
- (4) Warren Monroe, PLS - Jones and DeMille Engineering, Inc.

Coal Operator's Weekly Inspection Form

Grassy Trail Reservoir

Inspector
Name: Gregory Pressitt

Title: Winter Master

Date: 4/21/81 Date Last Inspection: 4/20/81

Site Name: _____

Refuse Facility I. D. No.: _____

1. Seepage* (specify location, color, and approx. volume)

From underdrain pipes	Yes	No
At isolated points on embankment slopes	Yes	<input checked="" type="checkbox"/> No
At natural hillside	<input checked="" type="checkbox"/> Yes	No
Over widespread areas	Yes	<input checked="" type="checkbox"/> No
From downstream foundation area	Yes	<input checked="" type="checkbox"/> No
"Boils" beneath stream or ponded water	Yes	<input checked="" type="checkbox"/> No
2. Cracks or scarps on crest Yes ☒ No
3. Cracks or scarps on slope Yes ☒ No
4. Sloughing or bulging on slope Yes ☒ No
5. Major erosion problems Yes ☒ No
6. Surface movements in valley bottom or on hillside* Yes ☒ No
7. Erosion of toe* Yes ☒ No
8. Water impounded against toe* Yes ☒ No
9. 0.20 Increase 8.53 Decrease in water level (feet)
10. Embankment freeboard (feet)
11. Cracks, bulging, or erosion on upstream face* Yes ☒ No
12. Visible sumps or sinkholes in slurry surface Yes ☒ No
13. Clogging*

Spillway channels and pipes	Yes	<input checked="" type="checkbox"/> No
Decant system	Yes	<input checked="" type="checkbox"/> No
14. Cracking or crushing of pipes*

Spillway pipes	Yes	<input checked="" type="checkbox"/> No
Decant system	Yes	<input checked="" type="checkbox"/> No
15. Trash racks clear and in place ☒ Yes ☒ No

Auth. KSC Signature: _____ Date: _____

Adverse conditions noted in items marked (*) should be described (extent, location, volume, etc.) in the space provided. Major adverse changes in these items could cause instability.

Inspection
Category

Comments

RT. Bank - 5.83 cfs. Walked down
Cloudy & Cool - 1/2 of the ice still on
Surface - 1" to 1" thick
No problem with over-flow
Structure - H2O down below lip
Bottom submerged for about 30 ft
No change in hillside slopes
Are clear about 100 ft

5/6/82 Clear & cool

9:00 A.M. - Met State
Eng. at the dam.

He didn't seem any
change at fence place
overflow clear.

Observed Big Spring
ditch with Eng.

Reg. A. 40 1 PM 6.684

Reached at Alamo
ditch Est 20 to 2500
going by estimating
flashes.

4:00 PM - Cleared O. 10/10

BT. Eng 3 PM 1.320 73.600

Est. at 4 PM 1.53 31.300

Est. Left Fork 7.120

5/7/82 - Clear & cool

Pat in New York

Kaiser & City

Helped me

Flow dropped because
of cool temps.

Flow kept to 100
BT Nicks

5/7/82 - Flow - cloudy &
& cool. Snow expected
Snow flow down
slide flows look
P.S.

Flow working good
Cleared over-flow
5/8/82 - Cloudy & cool
No stopping -

Flow working good
Cleared over-flow

5/9/82 - Cloudy & sunny

Over-flow clear
Yes, down 10.05

over 10 - 0.21

No change in conditions

No clearing up

Spiller - High clouds & away

1st dir - 900 1.46 1914

2nd dir - 300 1.27 174

3rd dir - 1.157

No change in condition
over-flow clean

Spiller - Cool & Clear

Lock messes up
on gate. Port w.c.

Lock on

Stream flows very

cleaning off here

No change in

condition around

dam

Spiller - Cloudy & cooler

Chopped over-flow

No clear & deepening

off

No change in

conditions around

dam

29.1
33.1

17.1

15.7

Spiller - Over-flow - 1.46

1.27

1.157

Spiller - Over-flow - 1.46

1.27

1.157

Spiller - Over-flow - 1.46

1.27

1.157

Spiller - Over-flow - 1.46

1.27

1.157

Spiller - Over-flow - 1.46

1.27

1.157

Spiller - Over-flow - 1.46

1.27

1.157

Spiller - Over-flow - 1.46

1.27

1.157

11/14/84 Clear & Sunny

Inspected dam
this morn.

No change in
condition.

Res. trapping
0.02 a day.

Seen 1/20 clear
and flows about
the same.

11/17/84 Clear & Sunny.
Little cooler

Talked with Phil Manno
about truck - bumper &
radio.

Phil to be out 23 of
Nov. to look over
properties.

Inspected dam -

11/13/84 Pt. Cloudy &

cooler -

Res. down 3.75
3.75

54
458.0 0.18 drop
18 per 4 days

0.04 drop H.V. Res.

No change in existing
conditions around dam
this date. See H2O clear
& flows the same.

Res. trapping about the
right amount to ensure
available volume for
any early runoff in
the spring, which protects
against ice causing trouble
around overflow.

RT. 1585 5' P = 0.015

Inspected Rt. Fork
to meadows. No stock

Remarks & Comments - 1982

4/19/82 - Windy & cold. Reservoir down 2.30 feet. Released more water to creek. Water clear coming out of seeps.

4/20/82 - Cold & windy. Light snow falling at dam. No apparent change in landslides.

Wind blowing hard at the dam. Ice not melting on dam surface very fast. Surface is still completely covered. No change landslide conditions. Reservoir down 2.36 feet.

4/21/82 - Cold & Windy. Reservoir still dropping. No change in conditions of landslides. Ice not moving. Drove to the top of dam for the first time this year.

4/22/82 - Sunny & windy. Reservoir down 2.42 feet. Ice still intact all across the dam surface. Some superficial sliding around the tunnel outfall. Snow moving around dam.

4/23/82 - Light snow & warmer. Reservoir still dropping a little. Ice still on surface. Boom starting to show up thru the ice. 4' Parshall at first diversion reading 0.60

4/24/82 - Clear & sunny. Reservoir down 2.50 feet. Ice still not moving off of the surface of the dam. Run-off should start any day now. No change in conditions of landslides.

4/25/82 - Pt cloudy & warmer. Reservoir down 2.30 feet and starting to gain. Ice still solid all over surface of dam. Reservoir gained 0.20 in 24 hours.

4/26/82 - Reservoir down 1.18 feet and gaining. Rt. fork 3' Parshall reading 0.76. Ice on reservoir about 4" thick at this time. Water coming from seeps.

4/27/82 - Pt. cloudy & warm. Reservoir down 1.86 feet and gaining. Ice still solid over the whole surface of dam. Seepage water flows the same and water clear.

4/28/82 - Clear & warmer. Reservoir down ~~3x2~~ 1.37 feet. 0.49 gain in 24 hours. Ice still on surface. Reservoir started to spill over the over-flow this afternoon. Boom frozen in ice.

4/29/82 - High clouds & cool. Ice still intact. water flowing over the over-flow smoothly. First diversion reading 0.88 4' Parshall 1.91 c.f.s.

5/1/82 - Raining & cool. Shut by-pass water off. Cleaned over-flow. Ice still on surface of reservoir, but should move off today. Slide areas look stable.

Remarks and Comments - 1982

5/2/82 - Continued- 11:00 P.M. starting to rain hard at dam. Ice layer still intact and being forced over boom and into grill area around over-flow. Stayed to 3:00 A.M. - 5/3/82 cleaning over-flow by keeping ice cleaned off. I came back to dam at 5:30 A.M. and cleaned over-flow. At 8:30 A.M. Cleaned over-flow again and observed flows coming into dam. Flows increasing fast.

5/3/82 - Talked to Kaiser about making a new boom. Cleaning over-flow 6 times a day at this time.

5/4/82 - Pt. cloudy & warmer. Cleaned over-flow. Freeboard - 7.94 feet. 0.34 going over lip of over-flow. Some 47.0 c.f.s. going over. Slide areas look good with no apparent change. Seeps running the same and the water is clear.

5/5/82 - Cold & windy - Free-board 7.90 feet from water level in dam and crest of dam.

5/6/82 - Met State Eng. at the dam. He didn't seem to think that there had been any change in the landslide areas. Observed the Big Spring diversion point with State Eng. Rdg 1.40 thru 3'Parshall Observed the Himonas diversion point. Est. 20 to 30 c.f.s. going by diversion point. Cleaning over-flow 3 times a day at this time. rt. Fork 3'Parshall - 1.54 - 23.6 c.f.s. - ~~First~~ First diversion 4'Parshall - 1.53 31.3 c.f.s.

5/7/82 - Clear and cool - Put in new boom with Kaiser & City people. Flows dropping because of cooler weather.

5/8/82 - Cloudy & cool - Reservoir free-board 8.05 feet. 0.21 going over lip of over-flow. Cleaned over-flow. Boom working good. No change in conditions of landslides around dam.

5/11/82 - Cloudy & Cool. Seepage flows the same and clear. No new slide areas. First diversion 4'Parshall 18.1 c.f.s.

5/12/82 - Cold & windy & Boom working good. Stream flow down alot. No change in conditions around dam.

5/13/82 - Clear & warm. Over-flow clean. Flows have dropped way off.

5/14/82 - Stream flows still dropping. Boom working good. No apparent change in landslide areas.

5/15/82 - Over-flow clean. Cloudy and chance of rain today. Light rain fell in the afternoon. No problem from any increase flows into the dam.

Remarks & Comments - 1982

5/16/82 - High clouds & Warmer. Boom in good shape and over-flow is clear of any trash. Nice rain again. No change in conditions around dam.

5/17/82 - Clear & cool. Inflow into reservoir dropping fast. Water is clear. Freeboard 8.18 feet. Seeps look clear and the flows the same. Not much water being used in towns at this time.

5/18/82 - Cloudy & Raining. Drove above dam to look at water shed. No change in conditions around dam. Roads slick. Boom in good order. Over-flow clean.

5/19/82 - Cloudy & cool. Cleaned over-flow. Freeboard 8.00 feet. Water going over lip of over-flow 0.27 feet. No apparent change in conditions around dam. 0.22 " of rain fell in area.

5/20/82 - Clear & Sunny. Freeboard 8.05 feet. 0.22 going over lip. Water flows dropping.

5/21/82 - Warmer. No change in conditions around dam. Cleaned over-flow.

5/22/82 - Routine. Turned more water to towns. Leaves starting to leave out on trees.

5/23/82 - Warmer. Snow starting to move fast. Seep water clear & flows the same. Canyon is starting to green and pretty.

5/24/82 - Pt. cloudy & warmer. Light rain in the evening. No apparent change in conditions around dam.

5/25/82 - High clouds & Warmer. First diversion 4' Parshall 1.46 - 29.1 c.fs. Right fork 3' Parshall 1.27 17.4 c.fs. No change in conditions around dam.

5/26/82 - Cool & clear. Lock messed up on gate. I put a new one on. No apparent change in conditions around dam.

5/27/82 - Cloudy & cooler. Cleaned over-flow. Flows dropping off. No change in conditions around dam.

5/28/82 - Routine - Cleaned over-flow. Roads are real rough. Percolation water around dam the same and the water water is clear.

5/29/82 - Routine - Boom working good. Cleaned over-flow. Some superficial sliding taking place in area of tunnel out-fall.

5/30/82 - Routine - Reservoir still over-flowing. Some superficial sliding taking place along bank near the road on the West side. Cleaned over-flow. Canyon is really green and pretty.

5/31/82 - Routine - Cleaned over-flow. Gate still locked. Water still being diverted to creek.

6/15/83	Clear & Sunny	6/17/83	Clear & Sunny
	Freeboard 7.23		Chk. of R tomorrow - up from yesterday
6/18/83	Cleaned over-flow	30 10 am	1st div 7.54 69.0 cfs
2/14	Talked with STAFF	5 ⁰⁰ pm	RT. flow
	people at dam - TRASH		2.66 55.0 cfs
1/14			left 18.0 cfs
	Cleaned TRASH around	2.0 cfs	going to
	edges of dam.		TRASH.
	Land shot drying		Cleaned over-flow
out.	Rd'g cfs		Cleaned TRASH
1st. 9 ³⁰ am	4 PM 268 75.0		Around edges of dam
6/16/83	Clear & Sunny		lots left.
	Worked on RAISON		left tank 420 muddy
Chlorinator			Right " "
9 am 1st div 4 PM 2 ⁴² 64.1			U Arm today - 4 ¹⁵ snow
	Cleaned over-flow		must be coming
"	logs on edges		
	of dam		

M. Page / R. Wilder

TOTAL - Both Forks	
GPM	Gal./Day

Shaver, Dave

From: Warren Monroe [Warren@jonesanddemille.com]

Sent: Thursday, March 03, 2011 12:24 PM

To: Shaver, Dave

Cc: Rusty Netz; Brian Barton; Jeremy Humes; Polly

Subject: Grassy Trail flow data

The historic data I have is from an untitled, unsigned document, 10 pages long, scanned into the Ut. State Division of Water Rights database.

The only heading on the document is "General Remarks". It infers it may have been a supplemental document to a proof, but I cannot be sure of that.

The following is a portion of pages 3,4: "On April 19, 1962, readings were taken at the measuring devices mentioned above, (3' parshall flumes) by Leon Pressett, water master, and the following data were collected: at 2:30 P.M. a reading of 0.86' was taken on the 3' Parshall Flume located in the Left Fork of Grassy Trail Creek above the reservoir indicating a flow of 9.48 cfs in the left fork. At 2:45 P.M. a reading of 1.60' was taken on the 3' Parshall Flume located in the Right Fork of Grassy Trail Creek above the reservoir indicating a flow of 25.10 cfs in the right fork, showing a total flow into the reservoir of 34.58 cfs. (I have verified these 2 flow rates for the depth of head from one of my water measurements manuals). At 2:10 P.M. of the same date, the water level indicator in the reservoir showed the water level in the reservoir to be El. 7607.48, indicating a storage of approximately 758 acre feet at that time. The water continued to rise in the reservoir until about a week later the reservoir overflowed with a storage of about 916 acre feet. There was no water being bypassed from the reservoir into Grassy Trail Creek at the time the flow of 34.58 cfs. was measured from the Left and Right Forks".

The following is a portion of pages 8,9: "On May 1, 1962, Win Templeton, Boyd McKean, Leon Pressett, and Ted Newell took several measurements of water being used"(measurements are from downstream diversions 4-9, unrelated to the reservoir inflow or storage) "On the same day, water was measured flowing into the reservoir as follows; The 3 foot Parshall Flume in the right fork showed a reading of 1.58 ft. indicating a flow of 24.6 cfs. The 3 foot Parshall Flume in the left fork showed a reading of 1.52 ft. indicating a flow of 23.1 cfs or a total flow into the reservoir of 47.7 cfs."

The results of water measurements of Grassy Trail Creek conducted on Jan. 18, 2011 by myself, assisted by East Carbon personal, approximately midday are as follows: Left Fork .276 cfs. or 124 gpm. Right Fork 2.145 cfs. or 963 gpm. Total inflow 2.421 cfs. or 1087 gpm. It was noted that at this time only 416 gpm of culinary water was going through the water treatment plant to the cities and Co-Gen. There was no evidence of the water level in the reservoir raising on this day, as it should have, based on the inflow and outflow. It is our conclusion that the reservoir is leaking drastically.

I hope this is what you're looking for. I have asked the cities about any other data, and no one has any knowledge of any other record.

If we can be of more assistance, give a shout. Thanks.

Warren Monroe, PLS
Jones and DeMille Eng. Inc.
Richfield, Utah 84701
435)896-8266
warren@jonesanddemille.com

3/4/2011

**JONES & DEMILLE ENGINEERING**

1535 South 100 West
Richfield, Utah 84701
Telephone (435) 896-8266
Fax (435) 896-8268

Project: Range Creek Feasibility	Page: 1
Location: Grassy trail Water	Date: 1-18-11
Product: Measurements	By: WM
Client: E. Carbon / Sunnyside	Checked:

Made site visit to Grassy trail reservoir this A.M. Approx. 1.5' snow depth. No visible signs of ice heave to reflect water level rising.

LT. Fork @ Grassy trail creek above reservoir.

4' \emptyset C.M.P. \pm outlet above res. partially silted in. Parshall Flume above reservoir washed out, sitting up on bank.

width of flow 2.3' \pm , depth of flow .10' + .20' + .25' = .55'
.55' \div 3 = .18 Ave. depth, Ave. width 2.3', Area 0.414 s.f.

timed travel for a stick to go 2 l.f. inside c.m.p. 3 sec.

$$\frac{3}{2} = 1.5 \text{ sec. / l.f.} \quad \text{Area .414 s.f.} \div 1.5 = .276 \text{ cfs} = 124 \text{ gpm}$$

RT. fork @ Grassy trail creek above reservoir.

3' steel parshall, rocks and gravel partially filled channel and flume. No staff gauge in flume. Determined measuring point by $2/3$ convergence length.

depth .40', but only 75% of the open channel flowing because of washed in gravel.

3' Parshall Flume, $Q = 4.00 W^{1.522} (W^{1.026})$

$$.4' \text{ depth} = 2.86 \text{ cfs} \times 75\% = 2.145 \text{ cfs} = 963 \text{ gpm}$$

Air temp
at Treatment
plant @ 1 P.M.
40° F.

No melting
on mountain.

In Flow: Total flow into Res. this A.M. $963 + 124 = 1087 \text{ gpm}$.

Out Flow: Meters at Treatment Plant this P.M. #1 202 gpm, #2 214 gpm, total 416 gpm

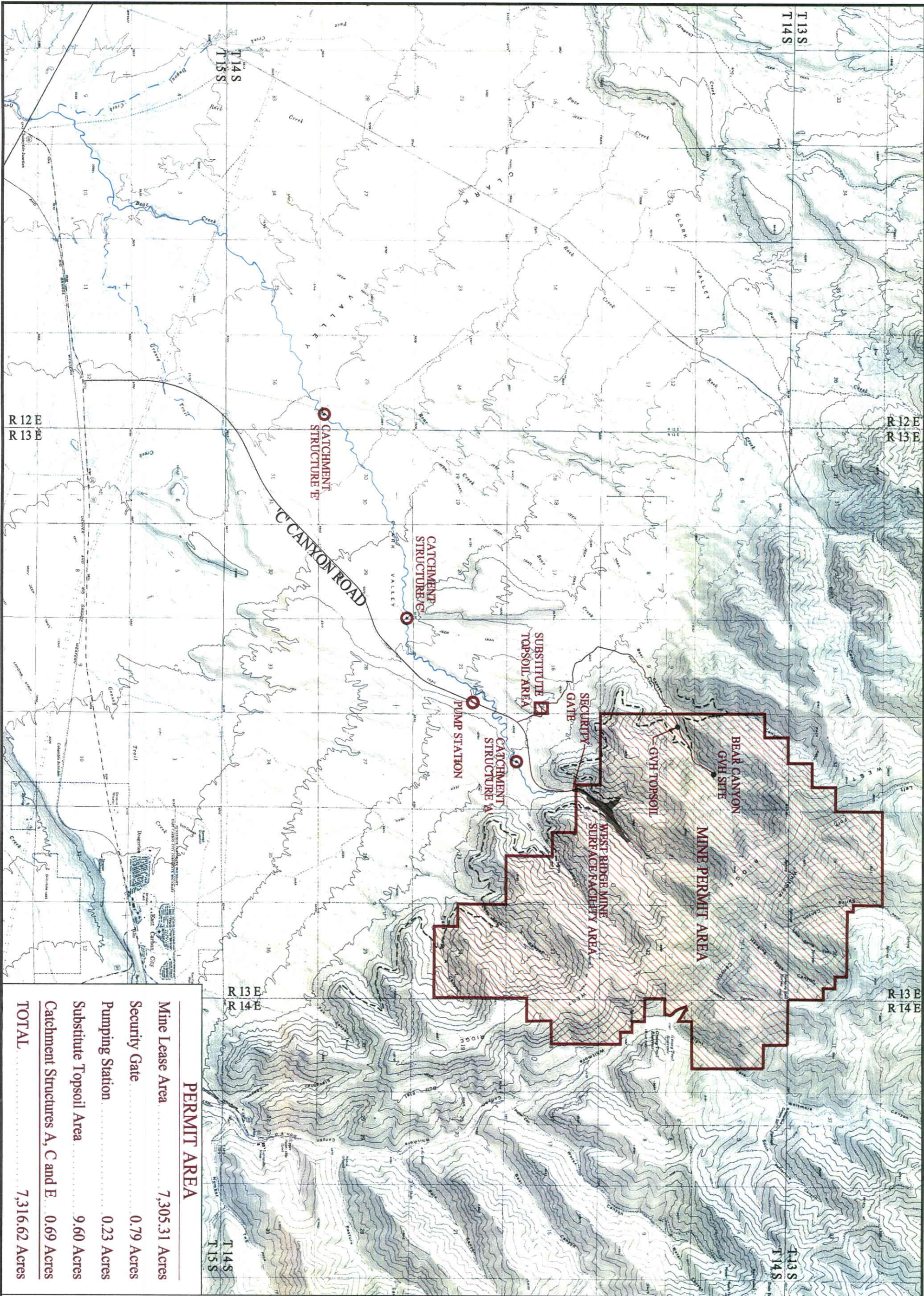
CONFIDENTIAL INFORMATION

ARCHEOLOGY REPORT
RAPTOR SURVEY INFORMATION

NOTE TO REVIEWERS:

THE ARCHEOLOGY REPORT AND THE RAPTOR
SURVEY FOR THIS SUBMITTAL ARE INCLUDED
SEPARATELY IN THE CONFIDENTIAL BINDER

MAPS



PERMIT AREA	
Mine Lease Area	7,305.31 Acres
Security Gate	0.79 Acres
Pumping Station	0.23 Acres
Substitute Topsoil Area	9.60 Acres
Catchment Structures A, C and E	0.69 Acres
TOTAL	7,316.62 Acres

WEST RIDGE MINE
Map 1-0, Permit Map
Map 1-1, Location Map

DATE: 1-26-11 REV: 10 ACAD REF: Maps 1-0 and 1-1 Rev 10

LEGEND:
Lease Areas
Surface Facility Area
GVN Site
Outcrop

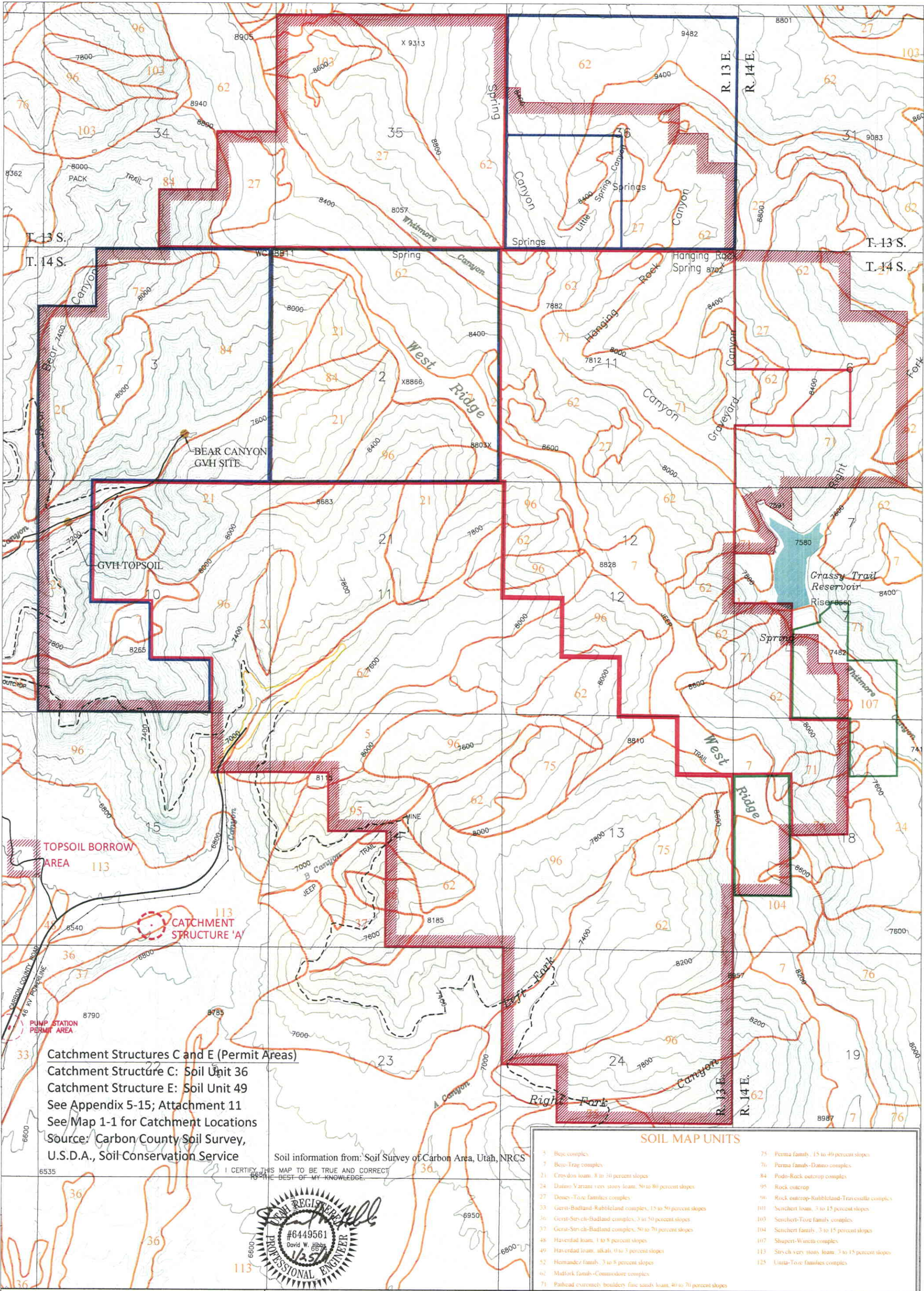


I CERTIFY THIS MAP TO BE TRUE AND CORRECT TO THE BEST OF MY KNOWLEDGE.



WEST RIDGE
RESOURCES, INC.

SCALE: 1"=5000'



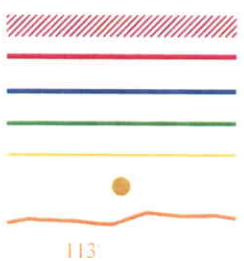
WEST RIDGE MINE

Map 2-1

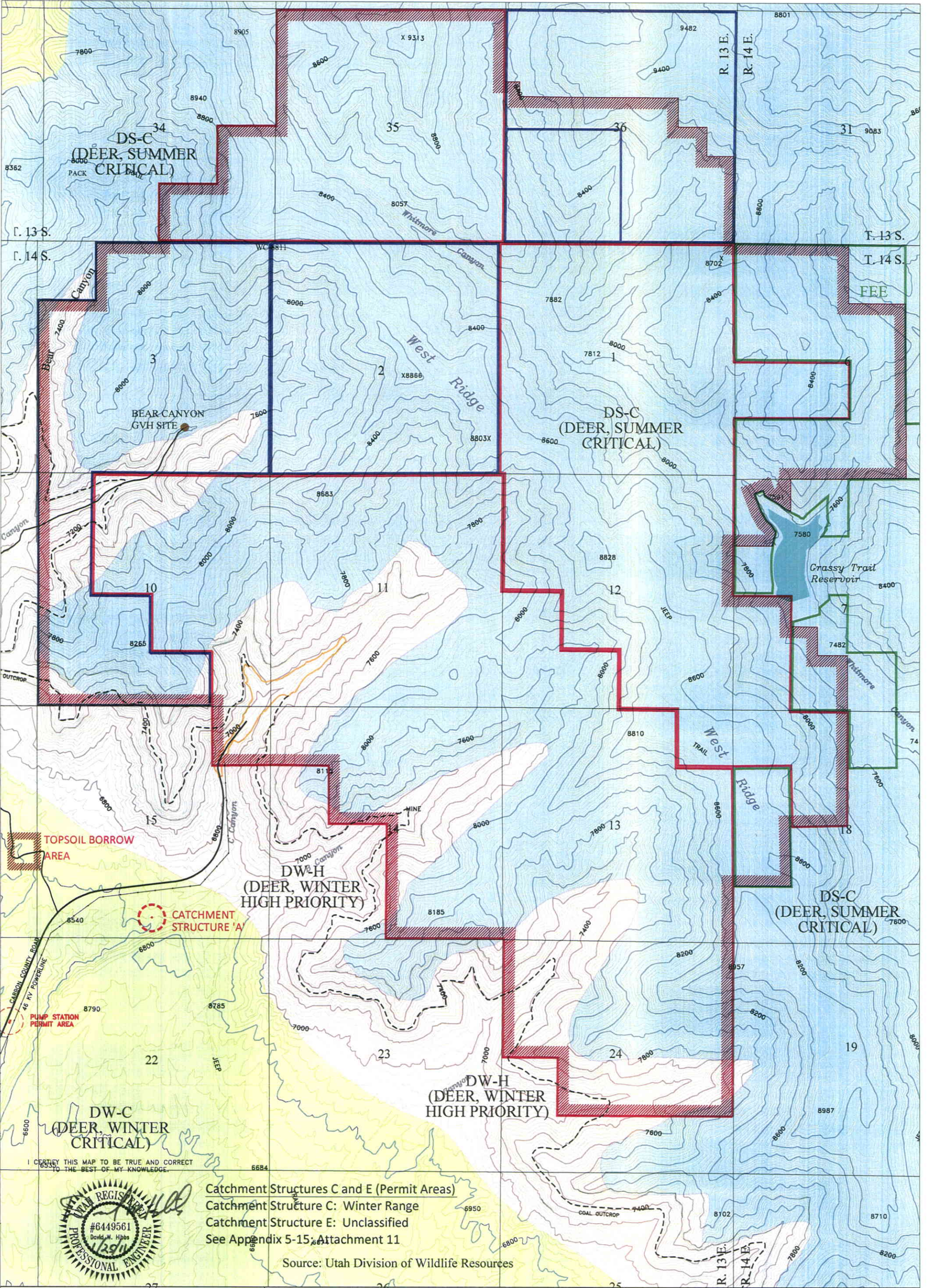
Regional Soil Map

TE: 1-26-11 REV: 18 ACAD REF: MAP2-1 REGSOIL REV18

LEGEND:
Permit Boundary
Federal Lease
State Lease
Penta Creek Fee
Surface Facility Area
GVH Site
Soil Mapping Boundary
Soil Map Number



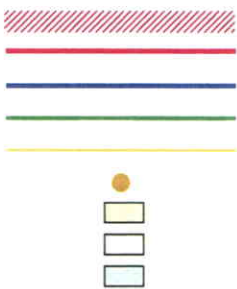
SCALE: 1"=2000'



WEST RIDGE MINE
Map 3-4B
Wildlife Map - Deer Range

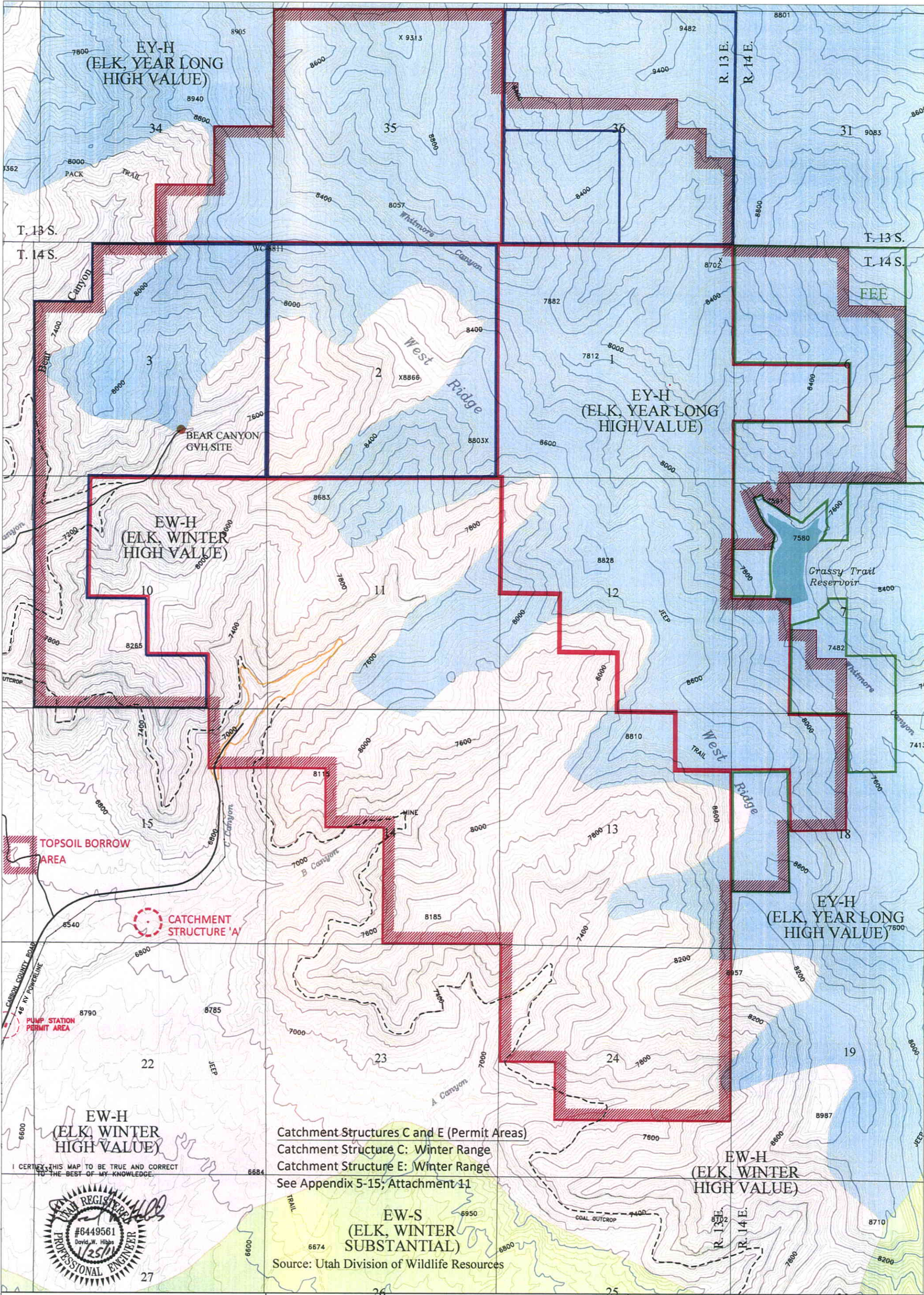
TE: 1-26-11 REV: 18 ACAD REF: MAP3-4B DEER REV18

- LEGEND:**
- Permit Boundary
 - Federal Lease
 - State Lease
 - Penta Creek Fee
 - Surface Facility Area
 - GVH Site
 - DW-C
 - DW-H
 - DS-C



WEST RIDGE
RESOURCES, INC.

SCALE: 1"=2000'



Catchment Structures C and E (Permit Areas)
Catchment Structure C: Winter Range
Catchment Structure E: Winter Range
See Appendix 5-15; Attachment 11

EW-S
(ELK, WINTER
SUBSTANTIAL)
Source: Utah Division of Wildlife Resources

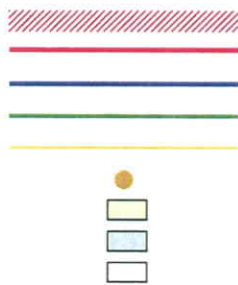
WEST RIDGE MINE

Map 3-4C

Wildlife Map - Elk Range

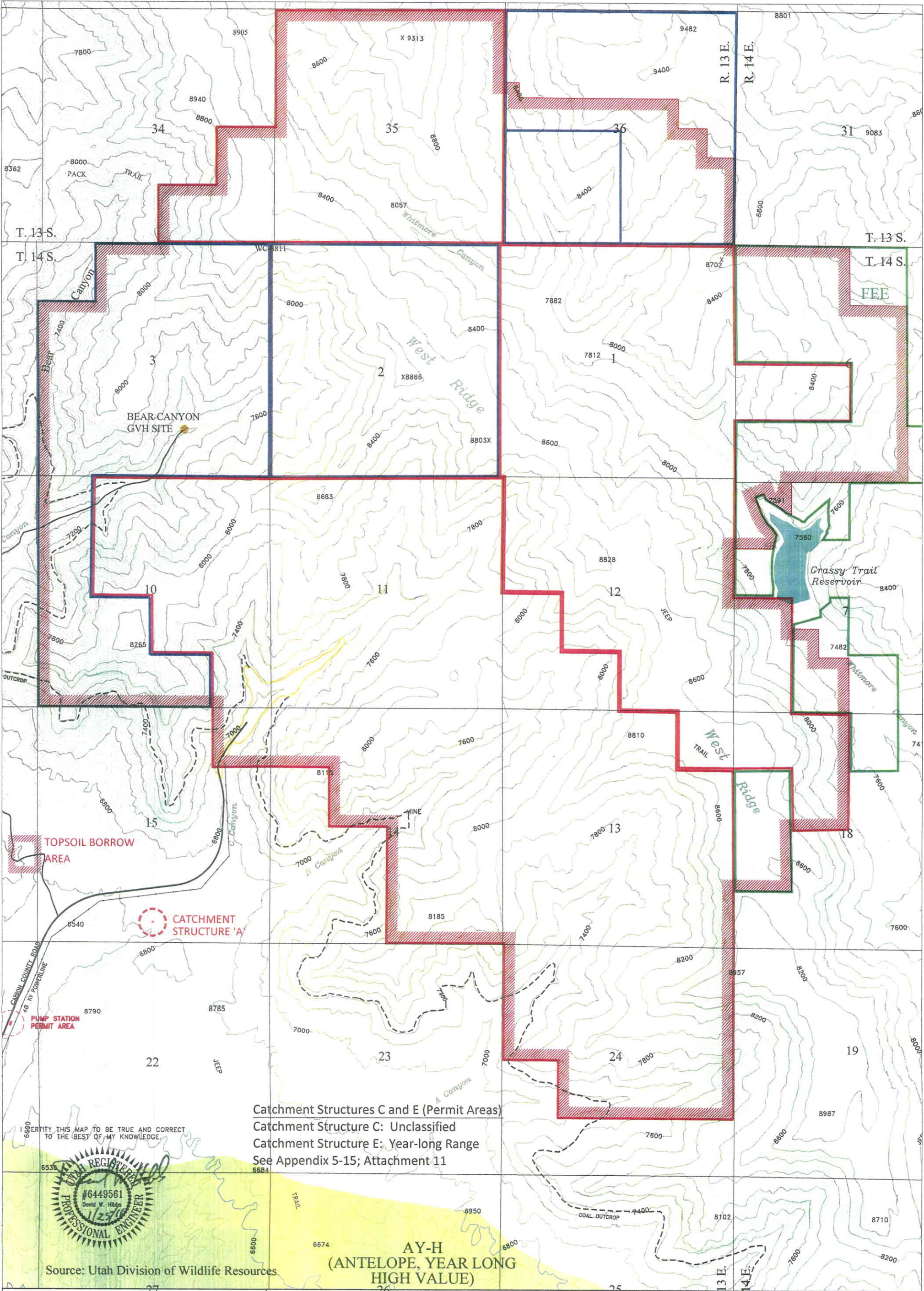
TE: 1-26-11 REV: 18 ACAD REF: MAP 3-4C ELK REV18

Permit Boundary
Federal Lease
State Lease
Penta Creek Fee
Surface Facility Area
GVH Site
EW-S
EY-H
EW-H



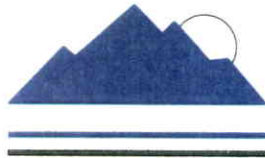
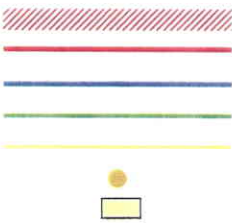
WEST RIDGE
RESOURCES, INC.

SCALE: 1"=2000'



Catchment Structures C and E (Permit Areas)
Catchment Structure C: Unclassified
Catchment Structure E: Year-long Range
See Appendix 5-15; Attachment 11

LEGEND:
Permit Boundary
Federal Lease
State Lease
Penta Creek Fee
Surface Facility Area
GVH Site
AY-H

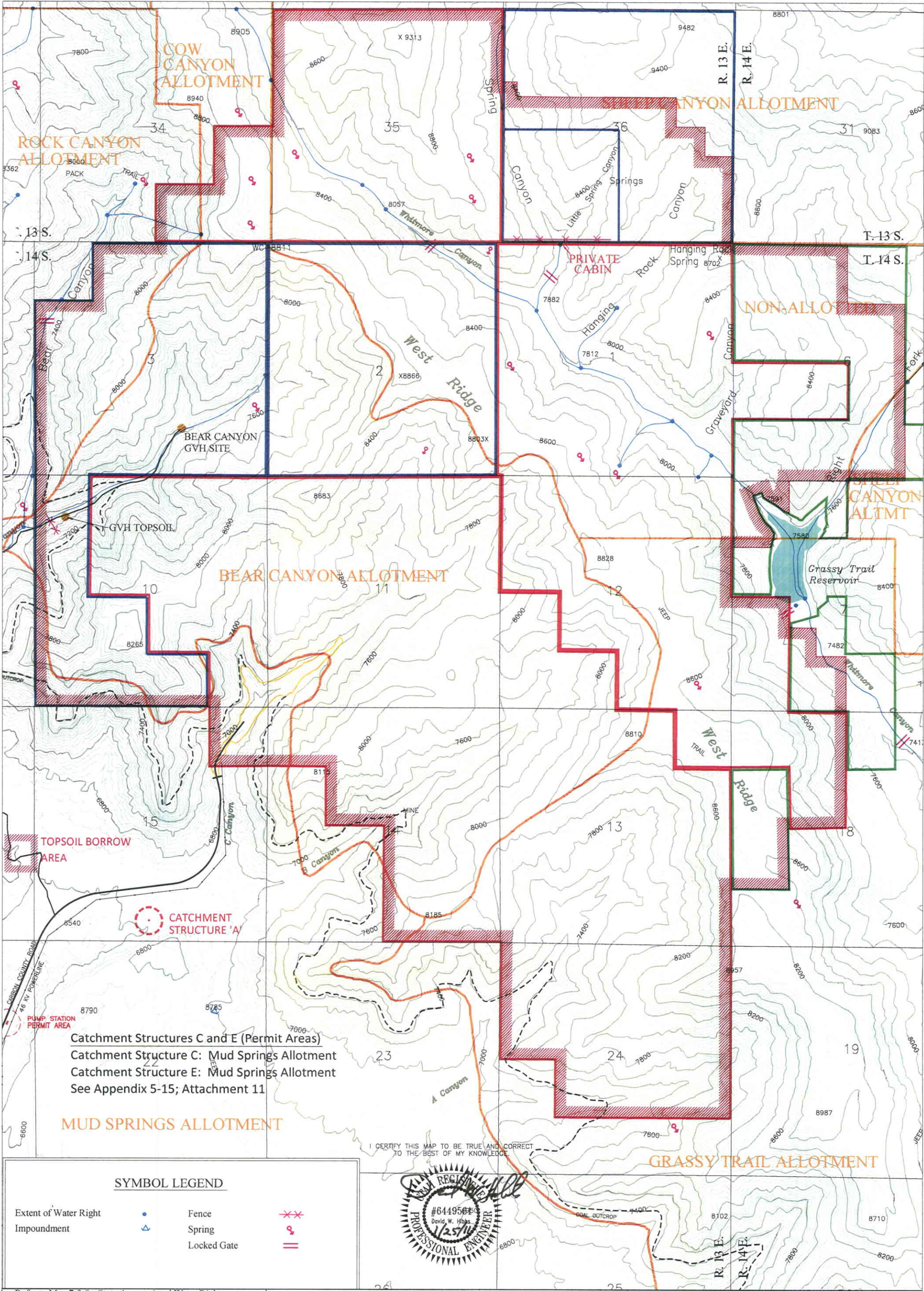


WEST RIDGE
RESOURCES, INC.

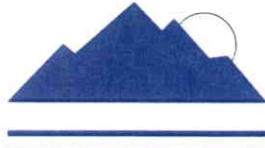


SCALE: 1"=2000'

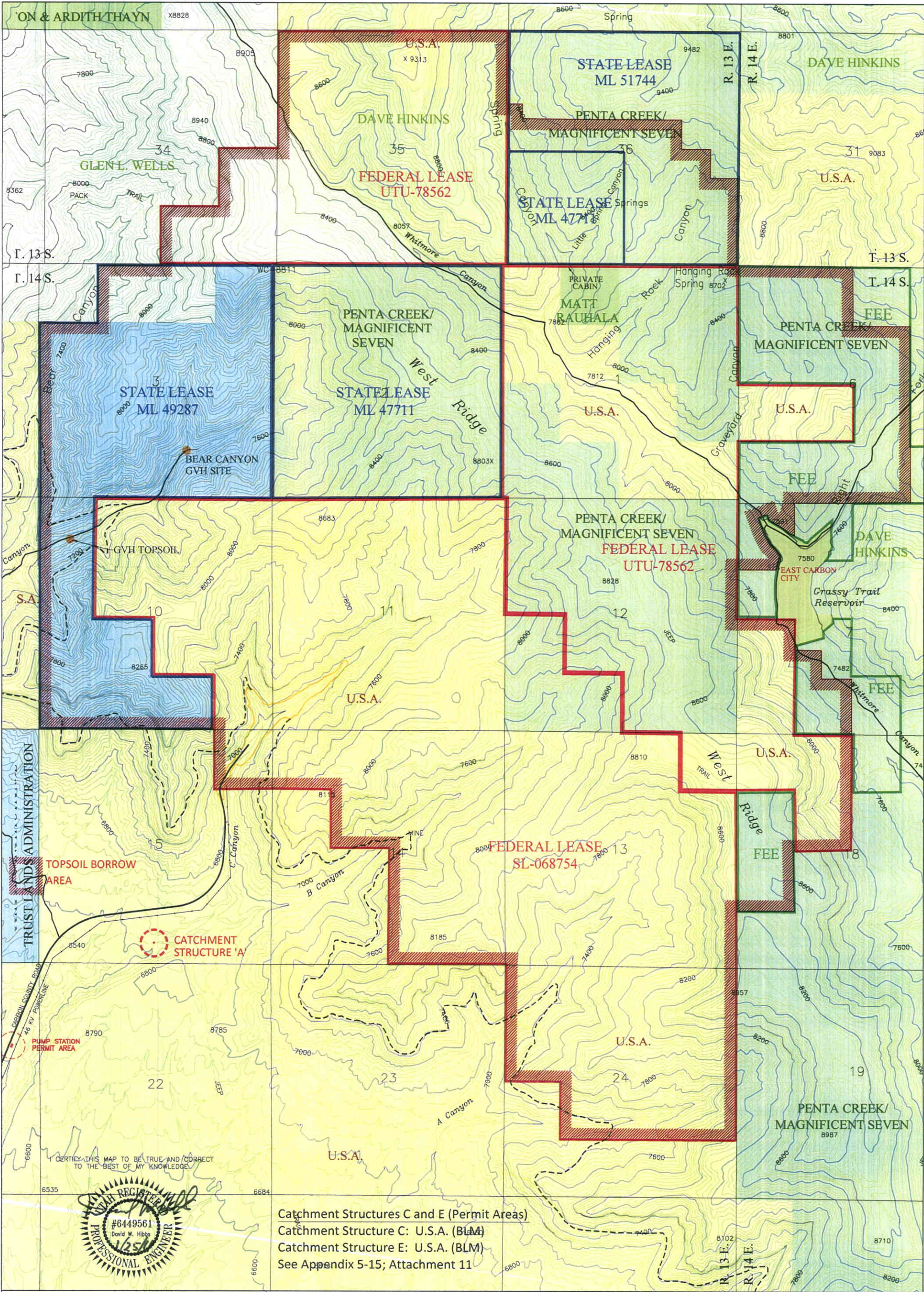
WEST RIDGE MINE
Map 3-4D
Wildlife Map - Antelope Range



Catchment Structures C and E (Permit Areas)
Catchment Structure C: Mud Springs Allotment
Catchment Structure E: Mud Springs Allotment
See Appendix 5-15; Attachment 11



WEST RIDGE
RESOURCES, INC.



Catchment Structures C and E (Permit Areas)
Catchment Structure C: U.S.A. (BLM)
Catchment Structure E: U.S.A. (BLM)
See Appendix 5-15; Attachment 11

LEGEND:

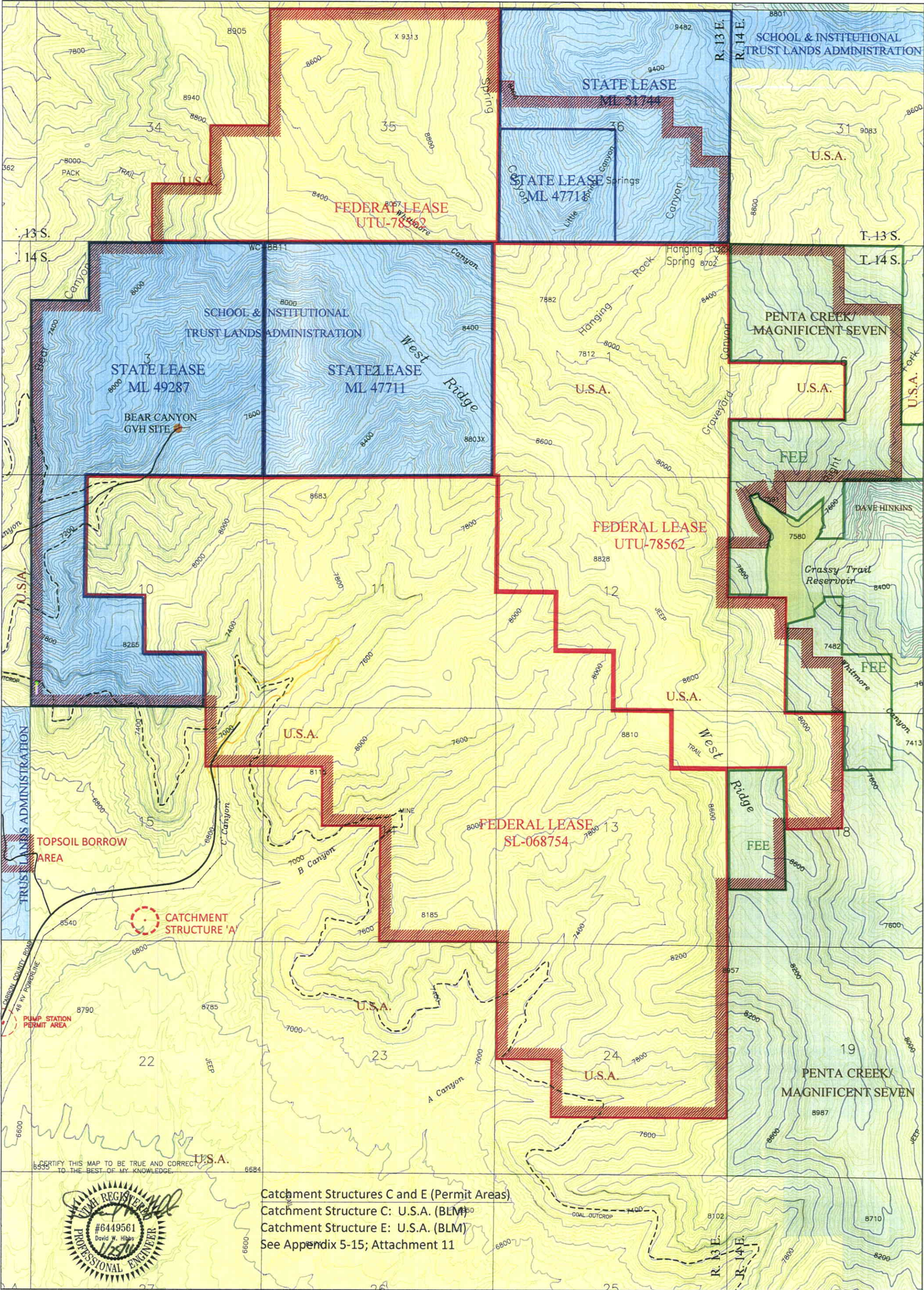
- | | | | |
|-----------------------|--|-------------------------------|--|
| Permit Boundary | | School Trust Land (SITLA) | |
| Federal Lease | | Penta Creek/Magnificent Seven | |
| State Lease | | U.S.A. (BLM) | |
| Penta Creek Fee | | Dave Hinkins | |
| Surface Facility Area | | Glen L. Wells | |
| GVH Site | | Matt Rauhala | |
| Outcrop | | Milton & Ardith Thayn | |
| | | East Carbon City | |

WEST RIDGE MINE
Map 5-2
Surface Ownership Map



WEST RIDGE
RESOURCES, INC.

SCALE: 1"=2000'



WEST RIDGE MINE
Map 5-3
Sub-surface Ownership Map

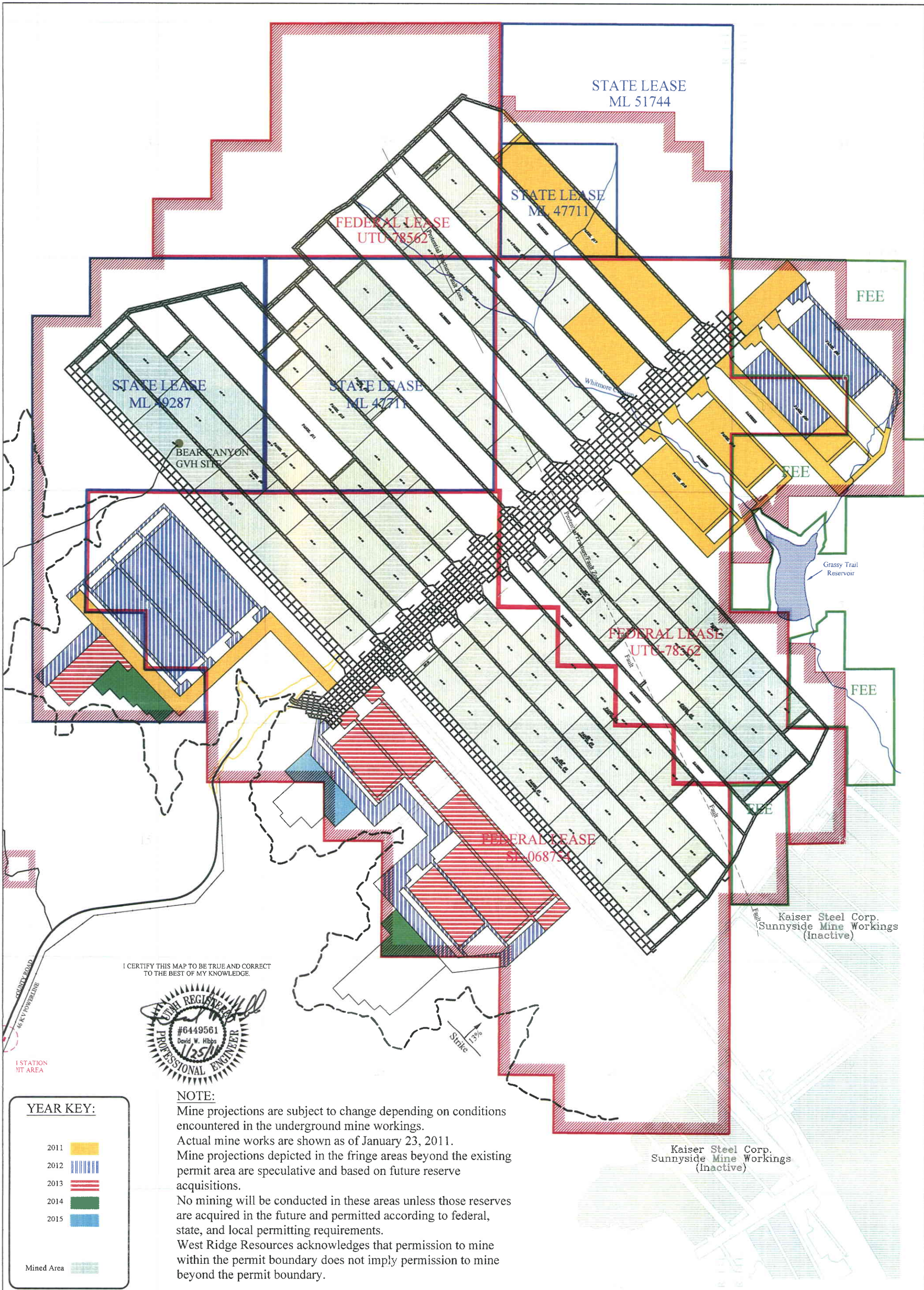
LEGEND:

- | | | | |
|-----------------------|--|-------------------------------|--|
| Permit Boundary | | School Trust Lands (SITLA) | |
| Federal Lease | | Penta Creek/Magnificent Seven | |
| State Lease | | U.S.A. (BLM) | |
| Penta Creek Fee | | Dave Hinkins | |
| Surface Facility Area | | East Carbon City | |
| GVH Site | | | |
| Outcrop | | | |



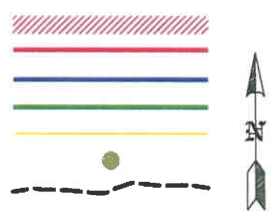
WEST RIDGE
RESOURCES, INC.

SCALE: 1"=2000'



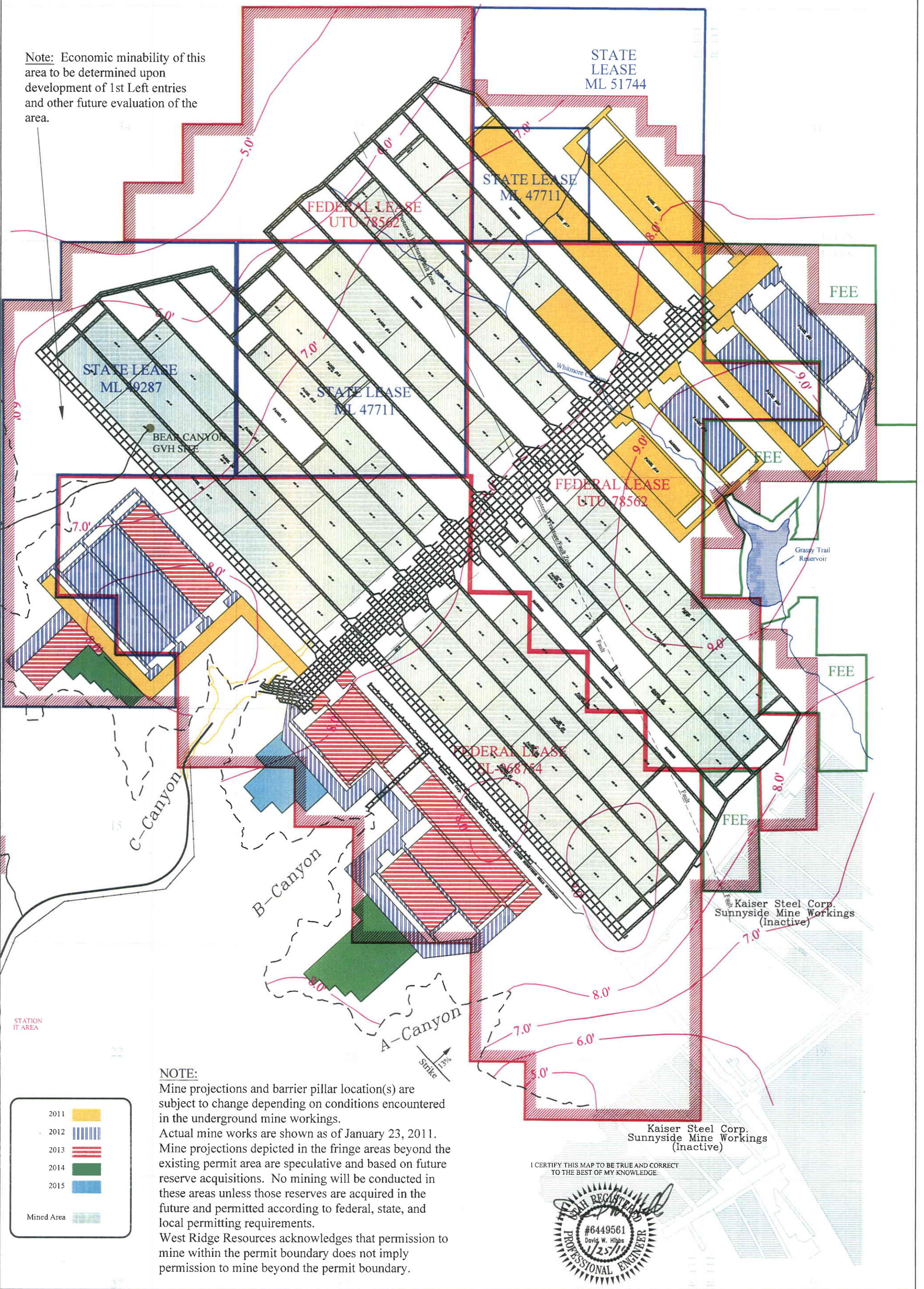
WEST RIDGE MINE
Map 5-4A
Mining Projections

- LEGEND:**
- Permit Boundary
 - Federal Lease
 - State Lease
 - Penta Creek Fee
 - Surface Facility Area
 - GVH Site
 - Outcrop



SCALE: 1"=2000'

Note: Economic minability of this area to be determined upon development of 1st Left entries and other future evaluation of the area.



WEST RIDGE MINE
Map 5-4B
Mining Projections
(Extended Reserves)

LEGEND:

Permit Boundary

Federal Lease

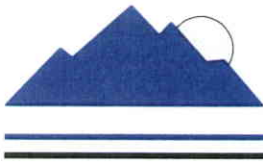
State Lease (ML 49287)

Penta Creek Fee

Surface Facility Area

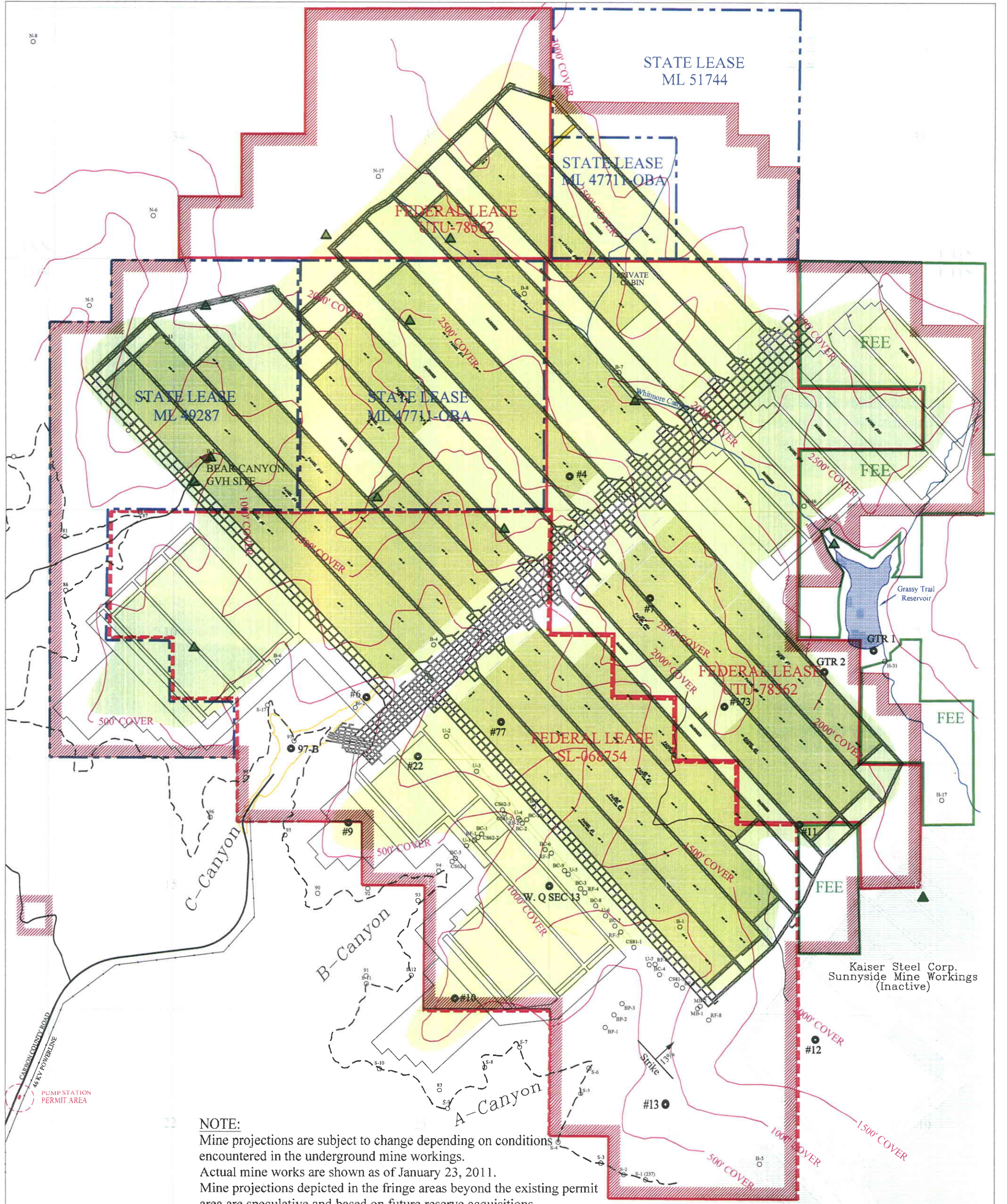
GVH Site

Outcrop



WEST RIDGE
RESOURCES, INC.

SCALE: 1"=2000'



NOTE:
Mine projections are subject to change depending on conditions encountered in the underground mine workings.
Actual mine works are shown as of January 23, 2011.
Mine projections depicted in the fringe areas beyond the existing permit area are speculative and based on future reserve acquisitions.
No mining will be conducted in these areas unless those reserves are acquired in the future and permitted according to federal, state, and local permitting requirements.
West Ridge Resources acknowledges that permission to mine within the permit boundary does not imply permission to mine beyond the permit boundary.
Longwall panels will be reconfigured as needed to prevent unauthorized subsidence beyond the permit area if extended reserves are not acquired in the future.
Additional control points will be added as mine advances.

CERTIFY THIS MAP TO BE TRUE AND CORRECT TO THE BEST OF MY KNOWLEDGE.

UTAH REGISTERED PROFESSIONAL ENGINEER
#6449561
David W. Hibbs
1/29/11

WEST RIDGE MINE
Map 5-7
Subsidence Map

TE: 1-26-11 REV: 20 ACAD REF: MAP5-7A SUBSIDE REV20

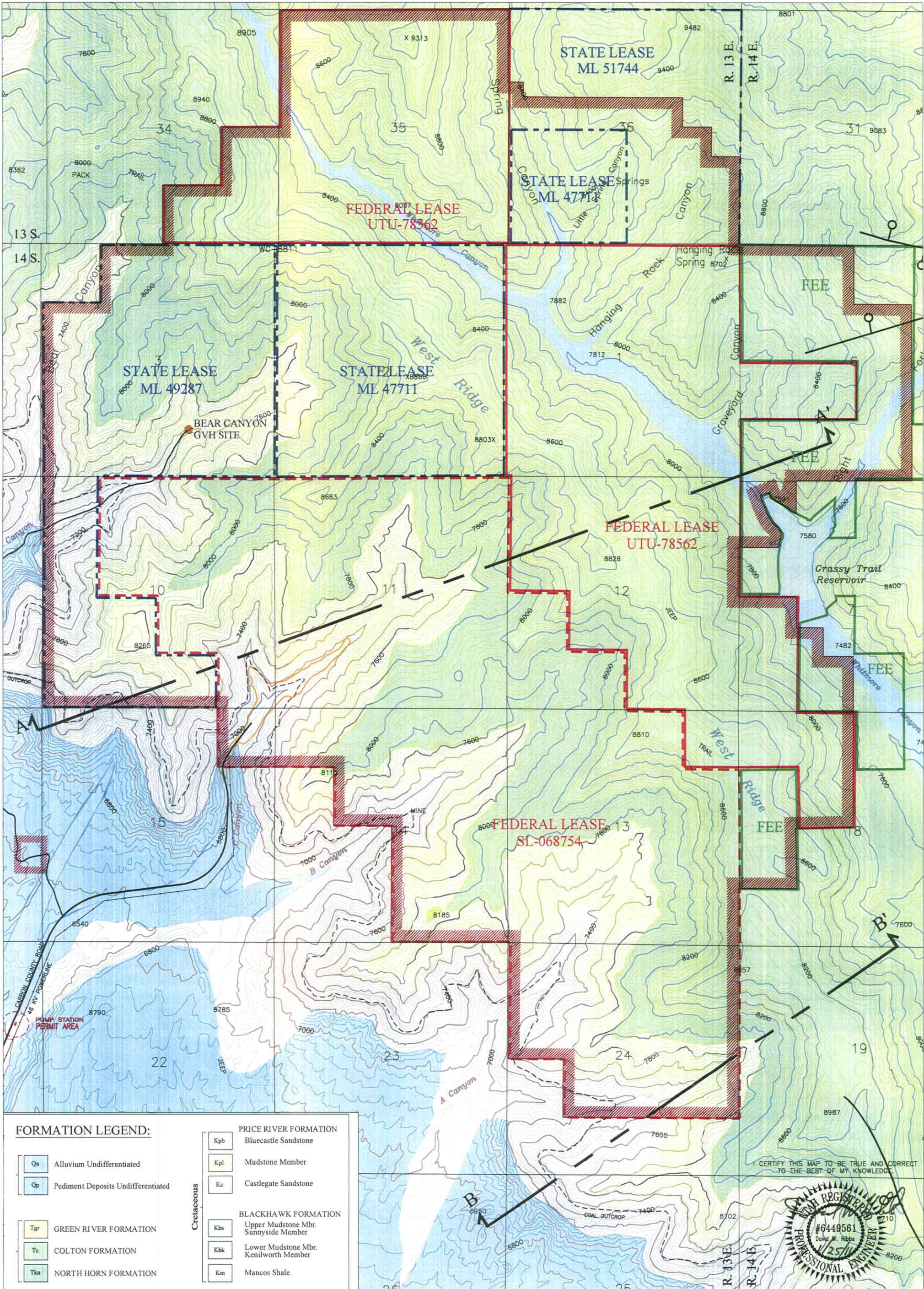
LEGEND:

- Permit Boundary
- Federal Lease
- State Lease
- Penta Creek Fee
- Surface Facility Area
- Outcrop
- Cover
- Drill Hole
- Possible Subsidence Area
- Existing Photogrammetric Control Points
- Future Photogrammetric Control Points






Scale bar: 0 to 500 feet

WEST RIDGE
RESOURCES, INC.







SCALE: 1"=2000'



FORMATION LEGEND:

- | | |
|--|------------------------------------|
|  Qa | Alluvium Undifferentiated |
|  Qp | Pediment Deposits Undifferentiated |
| | |
|  Tgr | GREEN RIVER FORMATION |
|  Tc | COLTON FORMATION |
|  Tkn | NORTH HORN FORMATION |

Cretaceous

- | | |
|---|-----------------------|
|  Kpb | PRICE RIVER FORMATION |
|  Kpl | Bluecastle Sandstone |
|  Kc | Mudstone Member |
|  Kbs | Castlegate Sandstone |
| | |
|  Kbk | BLACKHAWK FORMATION |
|  Km | Upper Mudstone Mbr. |
| | Sunnyside Member |
| | Lower Mudstone Mbr. |
| | Kenilworth Member |
| | Mancos Shale |

WEST RIDGE MINE

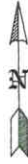
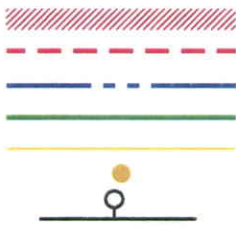
Map 6-1

Regional Geology Map

DATE: 1-26-11 REV: 16 ACAD REF: MAP6-1 GEOLOGY REV16

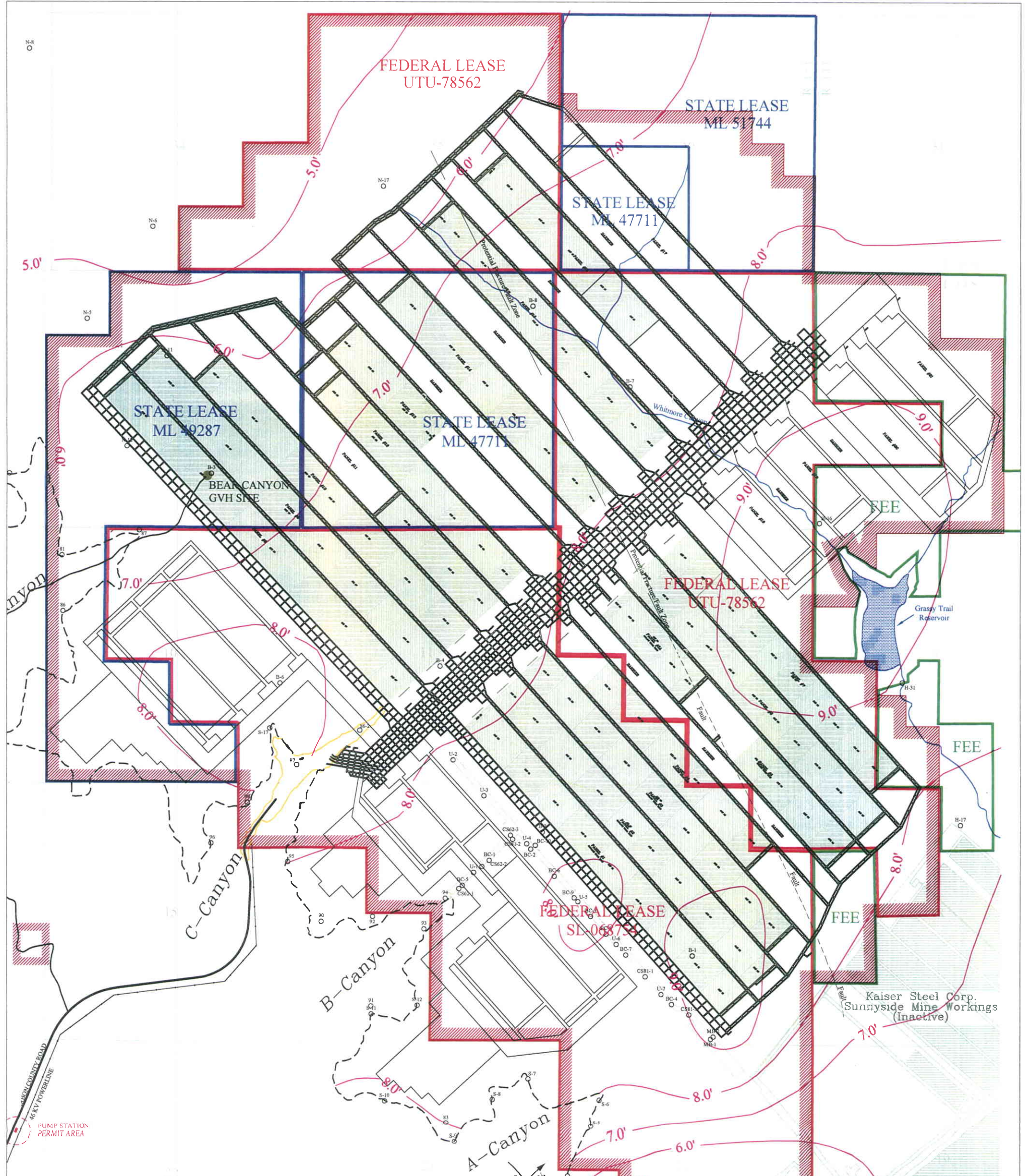
LEGEND:

- Permit Boundary
- Federal Lease
- State Lease
- Penta Creek Fee
- Surface Facility Area
- GVH Site
- Fault

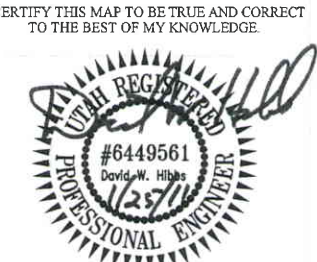


WEST RIDGE
RESOURCES, INC.

SCALE: 1"=2000'

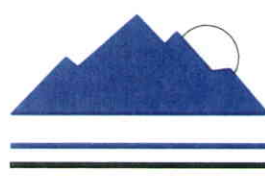
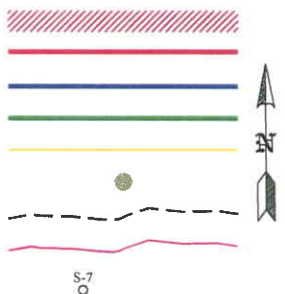


NOTE:
Mine projections are subject to change depending on conditions encountered in the underground mine workings. Actual mine works are shown as of January 23, 2011. Mine projections depicted in the fringe areas beyond the existing permit area are speculative and based on future reserve acquisitions. No mining will be conducted in these areas unless those reserves are acquired in the future and permitted according to federal, state, and local permitting requirements. West Ridge Resources acknowledges that permission to mine within the permit boundary does not imply permission to mine beyond the permit boundary.



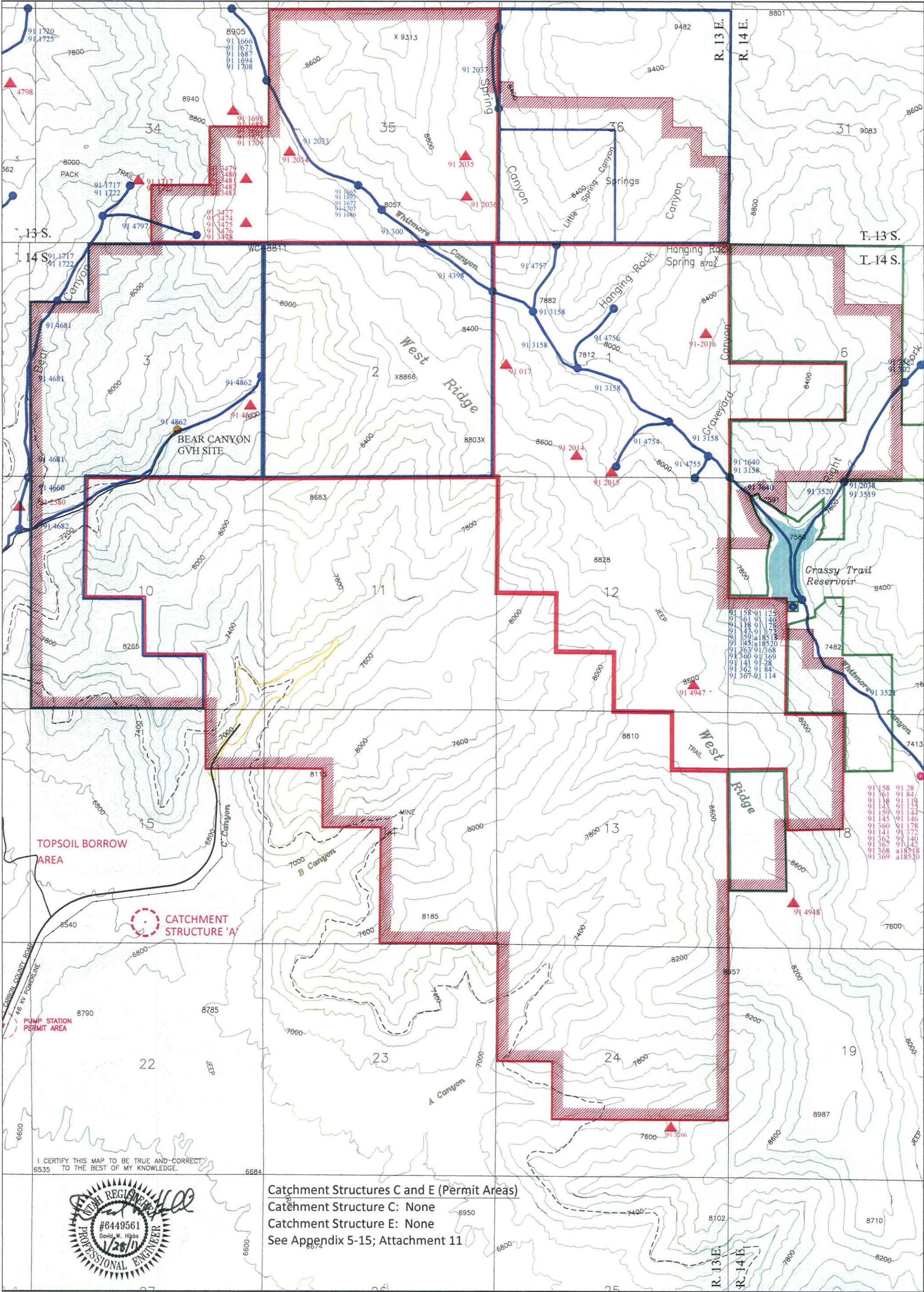
WEST RIDGE MINE
Map 6-3
Lower Sunnyside Coal Seam
Isopach Map

- LEGEND:**
- Permit Boundary
 - Federal Lease
 - State Lease
 - Penta Creek Fee
 - Surface Facility Area
 - GVH Site
 - Outcrop
 - Coal Isopachs
 - Drill Hole/Channel Samples



WEST RIDGE
RESOURCES, INC.

SCALE: 1"=2000'



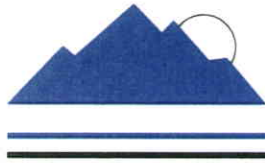
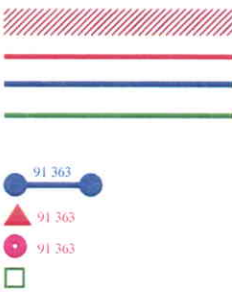
WEST RIDGE MINE
Map 7-3
Water Rights

TE: 1-26-11 REV: 19 ACAD REF: MAP7-3 WATERRIGHTS REV19



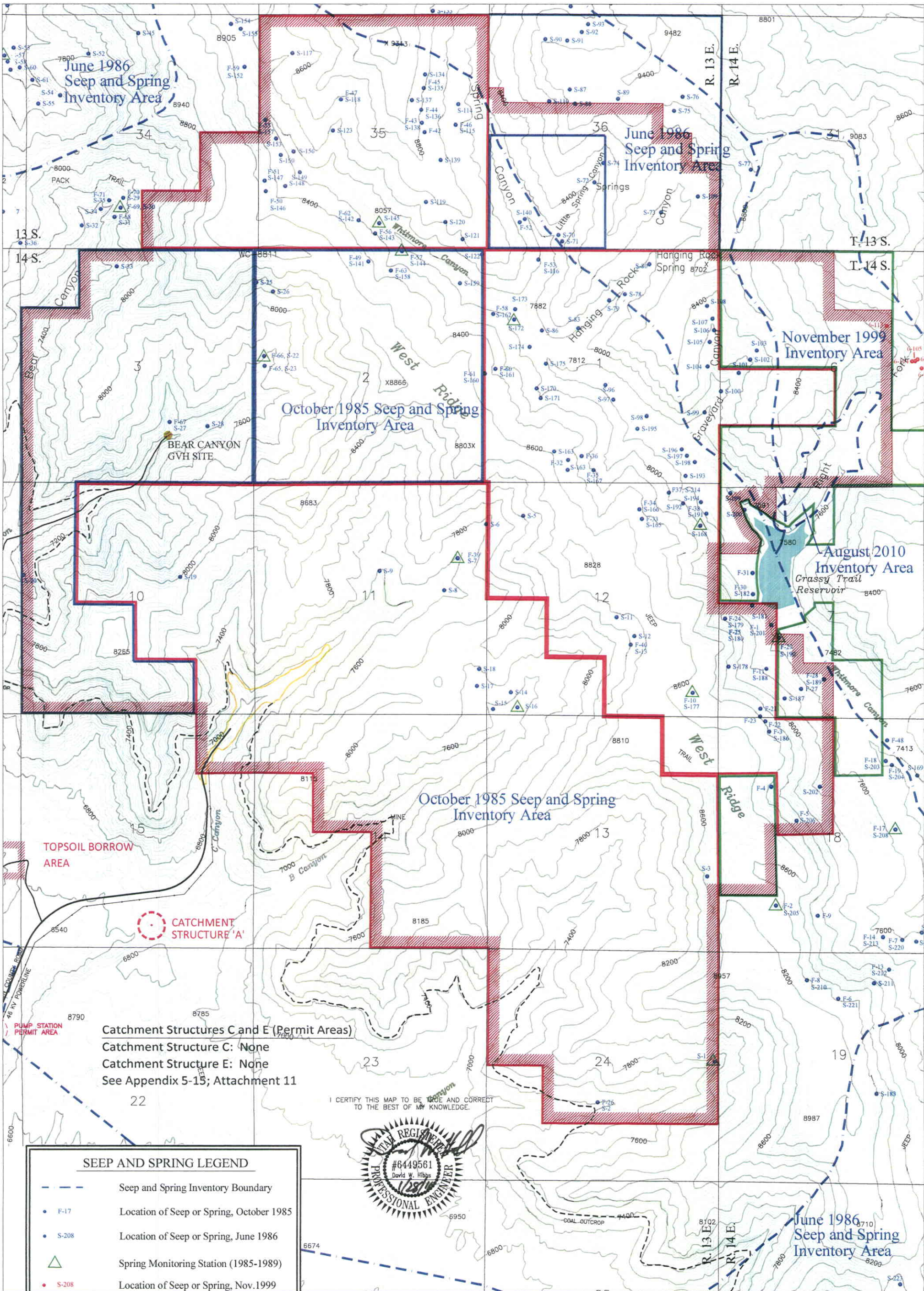
Catchment Structures C and E (Permit Areas)
Catchment Structure C: None
Catchment Structure E: None
See Appendix 5-15; Attachment 11

- LEGEND:
- Permit Boundary
 - Federal Lease
 - State Lease
 - Penta Creek Fee
 - Surface Water Right:
 - Point to Point
 - Spring
 - Ground Water Right
 - Municipal Water System Intake



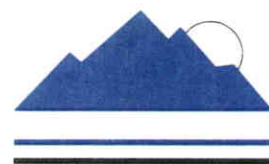
WEST RIDGE
RESOURCES, INC.

SCALE: 1"=2000'



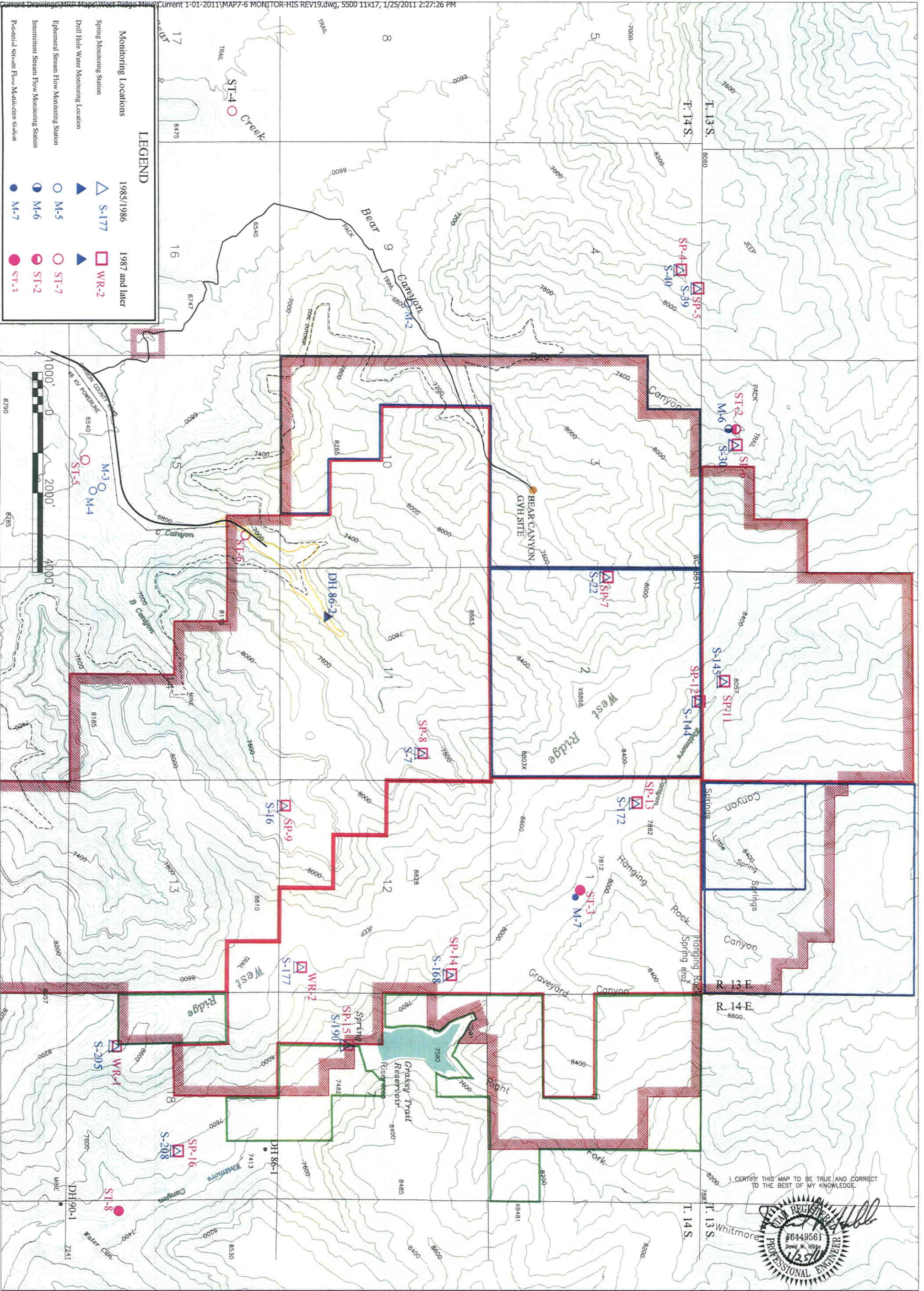
WEST RIDGE MINE
Map 7-5
Seep/Spring Survey Map

LEGEND:
Permit Boundary
Federal Lease
State Lease
Penta Creek Fee
Surface Facility Area
GVH Site



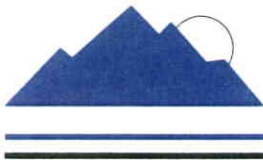
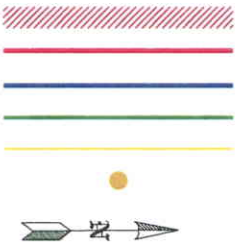
WEST RIDGE
RESOURCES, INC.

SCALE: 1"=2000'



WEST RIDGE MINE
Map 7-6
Hydrologic Monitoring Map
(Historical Monitoring Locations)

LEGEND:
Permit Boundary
Federal Lease
State Lease
Penta Creek Fee
Surface Facility Area
GVH Site



WEST RIDGE
RESOURCES, INC.

SCALE: 1"=2000'

